



# MAGNET MASTERNODE SETUP ON LINUX VPS

This tutorial shows the steps required to setup your Magnet masternode on a Linux server. Let's get started!

## REQUIREMENTS

- Linux server (e.g. Ubuntu 17.04 hosted on Google cloud in this tutorial)
- 10,000 MAG

## Renting and connecting to the server

Here are few VPS service providers to get You started - [www.vultr.com](http://www.vultr.com) / [www.digitalocean.com](http://www.digitalocean.com) / [cloud.google.com](http://cloud.google.com)

Next install SSH client - [www.putty.org](http://www.putty.org) / [www.bitvise.com](http://www.bitvise.com)

Generate a SSH key to configure VPS and add it to the client.

Connect will give you a shell session.

## PREPARING THE SERVER

Open a shell and type the following commands to install the dependencies needed for the magnet daemon.

```
sudo apt-get install build-essential libtool automake autotools-dev autoconf pkg-config libssl-dev libgmp3-dev libevent-dev bsdmainutils
sudo apt-get install 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
sudo apt-get install unrar
```

## INSTALLING THE DAEMON

It is recommended to build your wallet from source available on [Github](https://github.com).

Alternatively, you can download the latest binaries from our [official website](https://magnetnetwork.io).

For the purpose of this tutorial, we will install magnetd from the binary archive.

Type the following command:

```
mkdir magnet
cd magnet
wget https://magnetnetwork.io/Wallets/magnet-qt-LINUX.tar.gz
chmod +x magnetd
```

## STARTING THE DAEMON

We initially run the daemon so it creates the initial configuration files:

```
./magnetd
```

The daemon will print the following error and exit.

```
Error: To use magnetd, you must set a rpcpassword in the configuration file: /home/contact/.magnet/magnet.conf
```

## CONFIGURING THE DAEMON

Type the following command to edit the configuration file (using vi editor):

```
vi ../.magnet/magnet.conf
```

Press **i** to enter insert edit mode and paste the following (choose your own user and password):

```
rpcallowip=127.0.0.1
rpcport=17179
rpcuser=username_goes_here
rpcpassword=password_goes_here
server=1
listen=1
daemon=1
staking=0
port=17177
addnode=146.148.79.31:17177
addnode=104.196.202.240:17177
```

Press **ESC** to exit insert mode, press **:** to bring vi command, press **wq** to save and exit

We can now start the daemon again and it should print the message below:

```
./magnetd
Magnet server starting
```

## GENERATING A MASTERNODE KEY AND FUNDS ADDRESS

Type CTRL + **C** to get back to the command line (magnetd will keep running in the background):

```
./magnetd masternode genkey  
<copy your masternode key printed here>
```

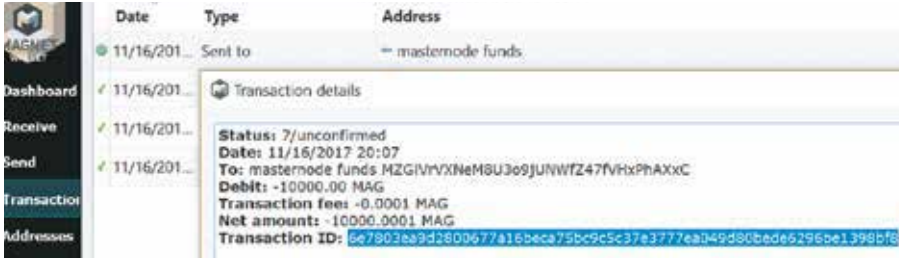
Copy the generated key we will need it later.

```
./magnetd getnewaddress  
<copy your funds address printed here>
```

Copy the generated address.

Transfer the funds to the address generated in the previous step and keep track of the transaction id.

If you are sending from magnet-qt (UI) you can retrieve the id in the transaction tab by clicking on the transaction:



If you are sending from the command line the transaction id will be printed on the screen:

```
contact@instance-1:~/magnet$ ./magnetd sendtoaddress NovJupdQ32rKHta  
Ha5d14e17Ce9LmLh 10000  
bf552cadf814b23a9a8eca9d98c8ff5cd619e08411f130bfbd90dd5c43d6938
```

It will take time for the wallet to fully sync and transaction to appear on the blockchain.

## VERIFYING THE FUNDS HAVE BEEN RECEIVED

We can now start the daemon again and it should print the message below:

```
./magnetd getbalance  
10000.00000000
```

## CONFIGURING THE MASTERNODE

You will need the following information in the next step:

**EXTERNAL\_IP**: Your masternode public IP (if you don't know it simply type the command `curl ipinfo.io/ip` in the shell to get it)

**MASTERNODE\_PRIVATE\_KEY**: The key generated with masternode genkey command

**TRANSACTION\_ID**: The transaction id from the funds

Type the following command to edit the masternode configuration file (using vi editor):

```
vi ../magnet/masternode.conf
```

Press **i** to enter insert edit mode and paste the following (edit the line by inserting the information from above):

```
Masternode1 EXTERNAL_IP:17177 MASTERNODE_PRIVATE_KEY TRANSACTION_ID 1
```

Press ESC to exit insert mode, press **:** to bring vi command, press **wq** to save and exit.

## FINALIZING THE DAEMON CONFIGURATION

Type the following command to edit magnet configuration file (using vi editor):

```
vi ../magnet/magnet.conf
```

Press **i** to enter insert edit mode and paste the following (edit the lines by inserting the information from above):

```
externalip=EXTERNAL_IP  
masternodeaddr=EXTERNAL_IP:17177  
masternode=1  
masternodeprivkey=MASTERNODE_PRIVATE_KEY
```

Press ESC to exit insert mode, press **:** to bring vi command, press **wq** to save and exit.

## STARTING YOUR MASTERNODE

Type the following command to restart your magnet daemon and pick up the configuration changes:

```
./magnetd stop  
Magnet server stopping  
./magnetd  
Magnet server starting
```

Type CTRL + **C** to get back to the command line.

Type the following command to start the masternode:

```
./magnetd masternode start  
successfully started masternode
```

Welcome to Magnet network!