

# Discount Coin Masternodes

How to setup a Discount Coin Masternode

Single and Multiple masternodes

Windows cold wallet managing Linux VPS connected Masternode

Version 1.0.2
The DiscountCoin Core Team
February 2018

# Table of Contents

Getting a Linux VPS	3
Configure Ubuntu 16.04	3
Install VPS essential packages :	
Download and compile Discount Coin daemon	
Single Masternode setup	
Multiple Masternode setup	
Generating masternode Private Key :	
Finish VPS configuration	5
Single Masternode setup	5
Multiple Masternode setup	6
Configuring Windows Wallet	7
Getting addresses	7
Sending coins	7
Getting Transaction hash & Transaction index	8
Activating masternodes	8

# Masternode Setup Environment:

- Windows cold wallet managing Linux VPS connected Masternode
- Setting up one or multiple masternodes
- Text in blue colour is to be copy/pasted on your computer

# **Getting a Linux VPS**

You need a Linux based machine to host your masternode. A VPS (Virtual Private Server) cost around \$5/month. We recommend you to rent one so you can be sure your masternode is online24/7.

There are many VPS providers available, we recommend OVH or Vultr, both are serious and have a good value for money. Any other provider is fine too, as long as they provide Ubuntu VPS.

When configuring your VPS, select Ubuntu 16.04 as Operating System.

# Configure Ubuntu 16.04

#### **Install VPS essential packages:**

Once connected to your VPS, with putty or through ssh connexion, you need to install basic package for DiscountCoin masternode.

Make sure your system is updated:

```
user@vps:~$ sudo apt-get update -y user@vps:~$ apt-get upgrade -y
```

## Install mandatory packages:

```
user@vps:~$ sudo apt-get install -y build-essential libtool autotools-dev pkg-config libdb5.3++
user@vps:~$ sudo add-apt-repository ppa:bitcoin/bitcoin
user@vps:~$ sudo apt-get update
user@vps:~$ sudo apt-get install libdb4.8-dev libdb4.8++-dev
user@vps:~$ sudo apt-get install -y libssl-dev libboost-all-dev autoconf automake libgmp-dev
user@vps:~$ sudo apt-get install -y libqt4-dev libminiupnpc-dev openssl software-properties-common
```

#### We need libsecp256k1 to run Discount Coin, let's download it and compile it:

```
user@vps:~$ sudo apt-get install git

user@vps:~$ git clone https://github.com/bitcoin-core/secp256k1

user@vps:~$ cd ~/secp256k1

user@vps:~$ ./autogen.sh

user@vps:~$ ./configure

user@vps:~$ make

user@vps:~$ ./tests

user@vps:~$ sudo make install
```

#### **Download and compile Discount Coin daemon**

VPS is ready, let's now download Discount Coin daemon from Github:

```
user@vps:~$ cd ~
user@vps:~$ git clone https://github.com/DiscountCoin/dsc
user@vps:~$ cd ~/dsc/src
user@vps:~$ make -f makefile.unix
```

This can take quite a while, let's enjoy a coffee.

Once compilation is finished (you'll know when it stop with no error, this is linux, no fancy acclamation if succeded), run this command :

```
user@vps:~$ strip DiscountCoind
```

#### Single Masternode setup

For a single masternode, just copy the DiscountCoin daemon you just compiled to binaries location and run it.

```
user@vps:~$ cp DiscountCoind /usr/bin/
user@vps:~$ DiscountCoind
```

#### **Multiple Masternode setup**

For multiple masternodes setup, we will create working locations for each masternode. In this example, we will configure two masternodes, you can customize it for more, but make sure your VPS is fitted for it. More masternodes on the same VPS need more RAM and more storage.

Creating 2 Directories for 2 Masternodes:

```
user@vps:~$ mkdir -p ~/DiscountCoin1/data
user@vps:~$ mkdir -p ~/DiscountCoin2/data
```

Copy DiscountCoin daemon in each directory:

```
user@vps:~$ cp ~/DiscountCoin/src/DiscountCoind ~/DiscountCoin1/DiscountCoind1 user@vps:~$ cp ~/DiscountCoin/src/DiscountCoind ~/DiscountCoin2/DiscountCoind2
```

Start both daemon in their own file tree:

```
user@vps:~$ ~/DiscountCoin1/DiscountCoind1 -datadir=~/DiscountCoin1/data user@vps:~$ ~/DiscountCoin2/DiscountCoind2 -datadir=~/DiscountCoin2/data
```

Your VPS setup is finished, now we need to configure your Windows hot wallet and generate private keys to activate your masternode(s).

# **Generating masternode Private Key:**

Go to your Microsoft Windows working station and download DiscountCoin client.

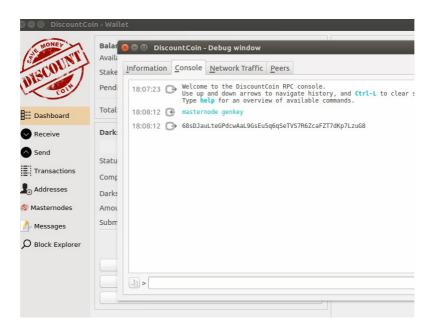
Launch Discount Coin client and let it synchronize with Discount network.

Once synchronization is finished, we will generate the masternode private key:

Open the debug console (Help → Debug Window → Console)

Type on console masternode genkey press [ENTER]

Type this as many times as number of masternodes you want to activate.



You will get this kind of result:

5F6asfZ16ytKmlde542JKSKERJD67RLASD98fhd7RlskKDj789k

## Finish VPS configuration

Let's go back to our VPS, through ssh or putty and edit masternode configuration file:

#### Single Masternode setup

Just edit your masternode configuration file with text editor (nano, vi, whichever you prefer)

user@vps:~\$ nano ~/.DiscountCoin/DiscountCoin.conf

#### And copy paste this conf:

```
rpcuser=type_any_random_string
rpcpassword=type_another_random_string
rpcport=9447
server=1
listen=1
daemon=1
masternodeaddr=[your-server-ip-address-here]:9448
masternode=1
masternodeprivkey=[your-private-key-generated-previously-on-windows]
```

Your masternode is ready to be launched, just start it and we will activate it in the last part from windows.

```
user@vps:~$ DiscountCoind -reindex -daemon
```

#### **Multiple Masternode setup**

For multiple masternodes setup, we will be editing the same configuration file, multiple times, with slightly variation on "ports" config.

#### Masternode 1:

```
user@vps:~$ nano ~/DiscountCoin1/data/DiscountCoin.conf
```

# And copy paste this conf:

```
rpcuser=type_any_random_string
rpcpassword=type_another_random_string
rpcport=9447
port=9448
masternodeaddr=[your-server-ip-address-here]:9448
masternode=1
masternodeprivkey=[your-masternode1-private-key-generated-previously-on-windows]
```

#### Masternode 2:

```
user@vps:~$ nano ~/DiscountCoin2/data/DiscountCoin.conf
```

# And copy paste this conf:

```
rpcuser=type_any_random_string
rpcpassword=type_another_random_string
rpcport=9446
port=9449
masternodeaddr=[your-server-ip-address-here]:9449
masternode=1
masternodeprivkey=[your-masternode2-private-key-generated-previously-on-windows]
```

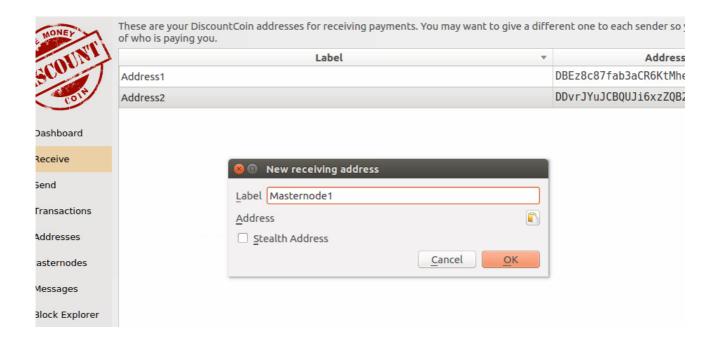
Your masternodes are ready to be launched, just start them again and we will activate them in the last part from windows.

# **Configuring Windows Wallet**

A DiscountCoin masternode needs 5000 coins as collateral to be eligible to reward distribution.

#### **Getting addresses**

You need a reception address to store thoses coins. Open DiscountCoin client and go to Receive->New Address. Give it the label you want, like "Masternode1", and valid. You now have a DiscountCoin address in your wallet.



If you have multiple masternodes, generate as many addresses as necessary (one by masternode).

For each masternode:

#### Sending coins

Send **exactly** 5000 Discount coins to its address, and wait at least 20 confirmations.

### **Getting Transaction hash & Transaction index**

Go to Help > Debug Window > Console > Type masternode outputs You should see an output like this:

```
  \{ \\ "1f654d3246fab24a654fe621004f00255ec1f9d032a4dfsdfacdb21654f" : "0" \\ \}
```

1 f 654 d 324 6 f ab 24 a 654 f e 621004 f 00255 e c 1 f 9 d 032 a 4 d f s d f ac d b 21654 f is your Transaction hash 0 is your transaction index

Copy and save those informations, we will use it later.

For multiple masternode, you get same result with multiple lines, each line give you a Transaction hash and Transaction index for each masternode.

#### Activating masternodes

Still in windows wallet, go to the Masternode tab and clic on the create button. Fill the form with these informations:

Alias: Masternode1

Address: [your-VPS-IP-address]:9448 (exemple: 172.196.154.32:9448)

PrivKey: Your-masternode-private-key

TxHash: Your-Transaction-hash

Output Index: Your-Transaction-Index

Reward address: leave empty or paste a DiscountCoin address to receive your rewards Reward %: leave empty or fill-in any number from 1 to 100 to send to reward address

Press "OK"

If you have multiple masternodes do same for second masternode except port will be 9449.

Press "Update"

Press "Start All"

Your masternode is ready and activated, you will receive block rewards soon, congratulations.