



Ducat Masternode Guide



Controller-Cold-Setup

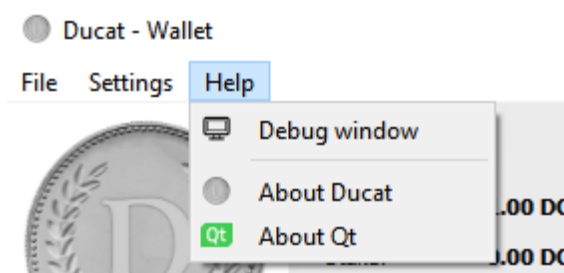
This is the advised method to setup your Masternodes. The wallet containing the coins does not have to be exposed and can run on your local computer. It does not have to run all the time and you are not vulnerable to someone hacking your VPS because all he can do when he hacked your VPS is stop your MNs but not steal your coins!

Desktop Wallet Setup

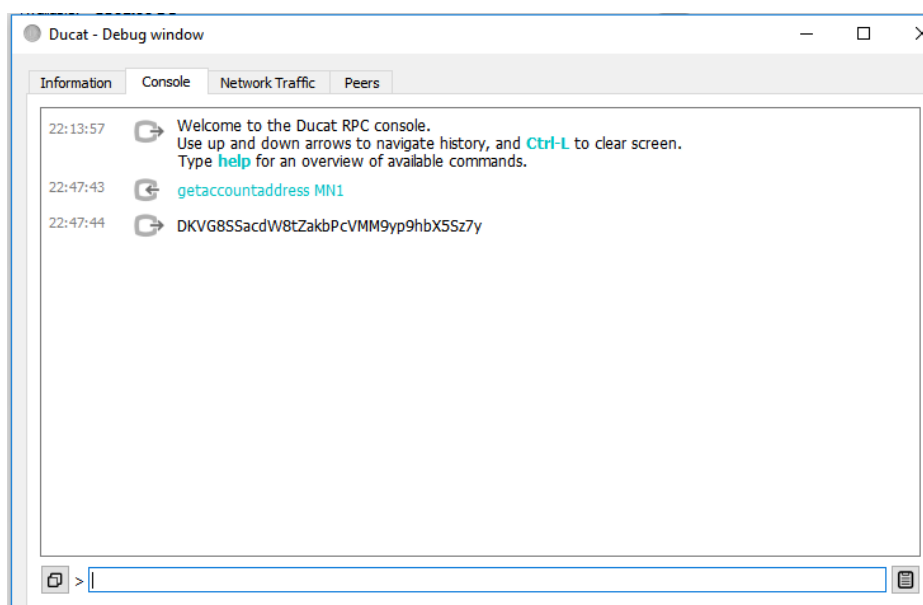
In the first steps the desktop wallet will be setup. This is the wallet you can run on your local PC. When the masternodes are connected this wallet can be closed and the PC does not have to run in order for the masternodes to generate rewards.

We will create an address, private key and transaction for each masternode (MN in the following) and show the necessary steps for configuration.

1. Open Console: Tools → Debug window



2. Type “getaccountaddress MN1” and press Enter.




Repeat this step for the amount of masternodes you want to setup as shown. Make sure you count up (MN1, MN2 etc.)



Ducat Masternode Guide





These are your Ducat addresses for receiving payments. You may want to give a different one to each sender so you can keep track of who is paying you.

Label	Address
MN1	DKVG8SSacdW8tZakbPcVM49yp9hbX5Sz7y
Standard	DRVeWdKZYnKEu2Em8j5VyyLRzS2LWfFc8j

DASHBOARD

RECEIVE

These are the addresses that will be associated with the MNs. You can view all you created addresses under Receiving Addresses

3. Send exactly 3500 coins to the MN address

Coin Control Features

Inputs...

Quantity: 1 **Amount:** 3501.00 DC **Fee:** 0.01 DC **After Fee:** 3500.99 DC
Bytes: ~226 **Priority:** highest **Low Output:** no **Change:** 0.99 DC

☒ custom change address Standard

Pay To:

Label:

Amount: DC

Klick on “add recipient” to add lines so you can send to all nodes in one transaction.

4. Now create (or open) the “masternode.conf” this file is located under %appdata%\Roaming\Ducat [Make sure you activated file extension!](#)

We will now add a Line for each MN with the following Format:

```
alias IP:port masternodeprivkey txhash outputindex
```

- Begin by entering and alias IP:port
 - Alias: the name of the MN receiving address (we named them MN1, MN2, ...)
 - IP: The static IP of your server (If you don't have one scroll down to find out where to get one!)
 - port: A port the MN will connect to. The port is not fixed and multiple nodes can run on one server but need different ports.

```
masternode.conf - Editor
Datei Bearbeiten Format Ansicht ?
MN1 199.247.21.63:10015 |
```

You can have more than one node per IP just adjust the ports. If you don't have a linux VPS by now please scroll down to “Get a Linux VPS first”

- Next we get the “masternodeprivkey “



Ducat Masternode Guide



- i. Open debug console again, type “masternode genkey” and press enter

```
22:52:52 69BmFqdpz2RCRXbTwvSQThMQShE9JuhTBLiW8bNPawGsxXHcqf3
```

- ii. Repeat the line for each MN you want to setup
- iii. Copy the output keys to the config

```
masternode.conf - Editor
Datei Bearbeiten Format Ansicht ?
MN1 199.247.21.63:10015 69BmFqdpz2RCRXbTwvSQThMQShE9JuhTBLiW8bNPawGsxXHcqf3
```

The private keys are used for voting and identify you as the real owner so don't share them.

- c. Next we will add txhash and outputindex

- i. Go to the debug console again, type “masternode outputs” and press enter
- ii. If you send the coins in one transaction the “txhash” will be the same. If you add a masternode later, another tuple will be added. So every

```
09:38:29 { "0438fb6c2e830ccfc9e609f05cc8c6da4e06f54d53153f641761b7ef6d66a5ff" : "1" }
```

masternode has a unique pair of txhash and outputindex

- iii. Copy the information to the config file (Make sure you don't forget the index!)

```
masternode.conf - Editor
Datei Bearbeiten Format Ansicht ?
MN1 199.247.21.63:10015 69BmFqdpz2RCRXbTwvSQThMQShE9JuhTBLiW8bNPawGsxXHcqf3 0438fb6c2e830ccfc9e609f05cc8c6da4e06f54d53153f641761b7ef6d66a5ff 1
```

This is what your config should finally look like.

5. Save the file and restart the wallet.

Ducat Network

My Master Nodes

Create...

	Alias	IP/Onion	Reward %	Reward Address	Status
1	MN1	199.247.21.63:10015			Not in the masternode list.

Verify now that your MN are shown in the Masternodes tab. (Press the update button below)

Getting a VPS

For the cold wallets you first need a Linux VPS. You can get very cheap ones for 5\$ here: <https://www.vultr.com/?ref=7285424>. These can run around 3 Arion masternode instances though it might be a good idea to split your MNs across some different Servers. The more isolation you have the less likely you are hit big by a server outage☺.

After registration you get to the Dashboard. You have to do the first payment with something else then Bitcoin. After the first payment you can pay the servers in BTC.



Ducat Masternode Guide



6. Deploy the server

The screenshot shows the Vultr 'Servers' page. The left sidebar has a 'Servers' link circled in red. The main content area shows a list of servers. A red circle highlights the '+' button in the top right corner of the page, used to add new instances.

Hit the plus top right to add new instances

7. Choose a region near you. It does not really matter.

The screenshot shows the 'Server Type' selection page. The '64 bit OS' tab is selected. The 'Ubuntu' option is chosen, and the '16.04 x64' version is selected. The 'Server Size' section shows three options: 20 GB SSD (\$2.50/mo), 25 GB SSD (\$5/mo), and 40 GB SSD (\$10/mo). The 25 GB SSD option is highlighted. The 'Deploy Now' button is visible at the bottom right.

- As “Server Type” choose Ubuntu and klick 16.04 (Important don’t take 17.10!)



Ducat Masternode Guide



- b. As Server Size choose the 5\$ instance with 1GB Ram. If available you can choose the 2.50\$ one if you only want to run only one node on it.
- c. Scroll down and give the node a name.
- d. After that click “Deploy now” in the overview you should see this:



8. Connect to the Server.

- e. You will need some SSH tool connect. I use “Royal-TS” to manage several connections at once. It’s a bit harder getting used too but has real value.
- f. To connect with “putty” a basic tool refer to [this guide](#)
- g. You can find username (root) and password when you click on the newly created instance. The installation has to finish before!
- h. Note: pasting your clipboard is “right click”

Automatic server installation and setup.

9. Download and execute script on VPS:

```
wget https://raw.githubusercontent.com/XeZZoR/scripts/master/Ducat/setup.sh
chmod 755 setup.sh
./setup.sh
```

This process is interactive and takes several minutes.

```
root@CORE-09:~# chmod 755 setup.sh
root@CORE-09:~# ./setup.sh
*****
* Ubuntu 16.04 is the recommended opearting system for this install.      *
*                                                                           *
* This script will install and configure your Ducat Coin masternodes.      *
*****

!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!
!                                                                           !
! Make sure you double check before hitting enter !                       !
!                                                                           !
!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!!

Do you want to install all needed dependencies (no if you did it before)? [y/n]
y
```

Enter y and press enter when you first setup the server. All dependencies and needed programs will be installed (takes ~10-30 minutes for compilation)



Ducat Masternode Guide



```
Configure your masternodes now!  
Type the IP of this server, followed by [ENTER]:  
199.247.21.63  
  
Enter masternode private key for node  
69BmFqdpz2RCRXbTwvSQThMQShE9JuhTBLiW8bNPAwGsxxXHcqf3  
Rule added  
Rule added (v6)  
root@CORE-09:~# Ducat server starting  
  
root@CORE-09:~#
```

Enter the asked information and hit enter. The Daemon will automatically start after the script finishes.

If you made an error when typing the interactive stuff: ctrl+c and restart the script 😊

10. Controlling the masternode

- The script from the last step already started the wallet on VPS

To see if everything works type “ducatd getinfo”

```
root@CORE-10:~# ducatd getinfo  
{  
  "version" : "v1.0.0.0-60028",  
  "protocolversion" : 60028,  
  "walletversion" : 60000,  
  "balance" : 0.00000000,  
  "darksend_balance" : 0.00000000,  
  "newmint" : 0.00000000,  
  "stake" : 0.00000000,  
  "blocks" : 264,  
  "timeoffset" : 0,  
  "moneysupply" : 1600000.00000000,  
  "connections" : 5,  
  "proxy" : "",  
  "ip" : "199.247.21.63",  
  "difficulty" : 0.00001526,  
  "testnet" : false,  
  "keypoololdest" : 1524297580,  
  "keypoolsize" : 101,  
  "paytxfee" : 0.01000000,  
  "mininput" : 0.00000000,  
  "errors" : ""  
}
```

You can see the amount of blocks here. Wait till it's fully synced till the next step.

- If sync is finished go to your desktop wallet and start MNs in the masternode tab (unlock wallet before).

Ducat Network

My Master Nodes

Create...

	Alias	IP/Onion	Reward %	Reward Address	Status
1	MN1	199.247.21.63:10015			Masternode is Running.



Ducat Masternode Guide



- c. See if node is running: “ducatd masternode status”

```
root@CORE-10:~# ducard masternode status
{
  "vin" : "CTxIn(COutPoint(0438fb6c2e, 1), scriptSig=)",
  "service" : "199.247.21.63:10015",
  "status" : 9,
  "pubKeyMasternode" : "DPC75sGyFkXCJAuBB4fgiJCtDgtZY6LwrC",
  "notCapableReason" : "Could not find suitable coins!"
}
```

If you see this status your node is successfully running and you can close the controller wallet!

In case of status 2 follow the following steps:

```
ducard stop
ducard -reindex
```

After this wait for sync again and start it from the GUI like before!