

APR Masternode Guide

Controller-Cold-Setup

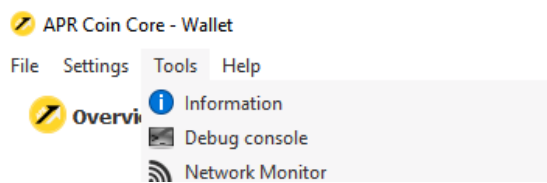
This is the advised method to setup your Masternodes. The wallet containing the coins does not have to be exposed and can run on your local computer. It does not have to run all the time and you are not vulnerable to someone hacking your VPS because all he can do when he hacked your VPS is stop your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

Desktop Wallet Setup

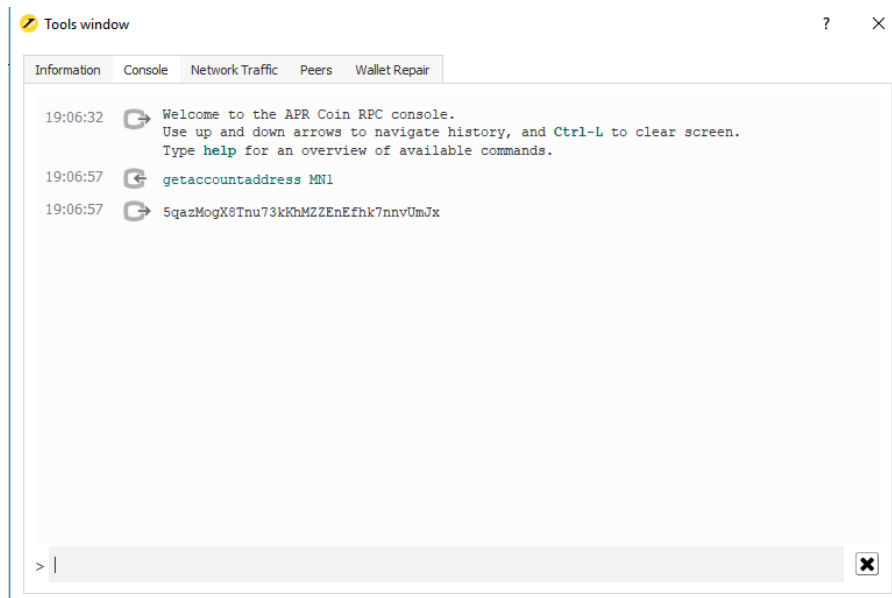
In the first steps the desktop wallet will be setup. This is the wallet you can run on your local PC. When the masternodes are connected this wallet can be closed and the PC does not have to run in order for the masternodes to generate rewards.

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

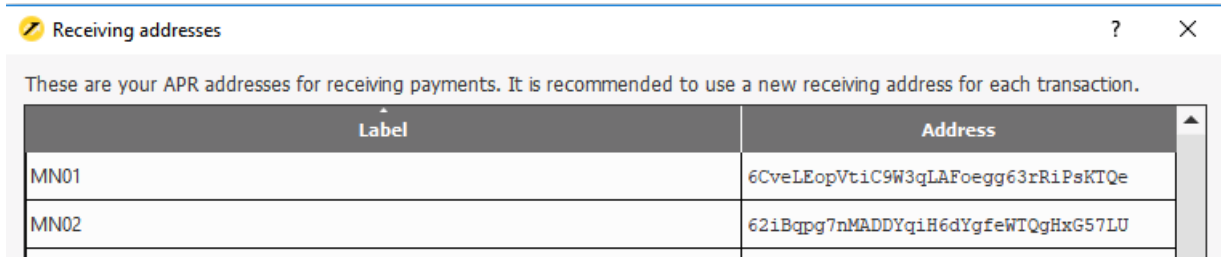


2. Type “getaccountaddress MN1” and press Enter.



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

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

3. Send exactly 3000 coins to the MN address

Coin Control Features

Open Coin Control... Coins automatically selected

☐ Custom change address Enter a APR address (e.g. DTVFR83SQbiezzW72hjc...

☐ Split UTXO # of outputs UTXO Size: 0 APR

Pay To: SqazMogX8Tnu73kRkMZZEnEfkh7nnvUmJx

Label: MN1

Amount: 3 000.00000000 APR

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

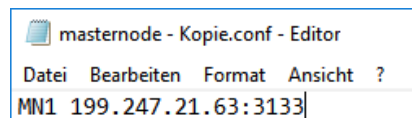
4. Now create (or open) the “masternode.conf” this file is located under %appdata%\Roaming\AprCoin

[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
```

- a. Begin by entering and alias IP:port
 - i. Alias: the name of the MN receiving address (we named them MN1, MN2, ...)
 - ii. IP: The static IP of your server (If you don't have one scroll down to find out where to get one!)
 - iii. 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.



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”

- b. Next we get the “masternodeprivkey “

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

```
19:11:40 ➡ masternode genkey
19:11:40 ➡ 2ZB1ESe4K32DXunJQWwGrVSEcTVdW328xr69rruHxFg2uEqCzW
```

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

```
masternode - Kopie.conf - Editor
Datei Bearbeiten Format Ansicht ?
MN1 199.247.21.63:3133 2ZB1ESe4K32DXunJQWwGrVSEcTVdW328xr69rruHxFg2uEqCzW
```

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.



Achtung: Der Status Ihrer Masternodes kann in der lokalen Wallet leicht inkorrekt sein. Warten Sie immer bis die Wallet vollständig synchronisiert ist und überprüfen Sie von einer anderen Installation aus, sollte Ihre Masternode immer noch als "MISSING" angezeigt werden.

Name	Adresse	Protokoll	Status	Aktiv	Zuletzt gesehen (UTC)	Öffentlicher Schlüssel
MN1	199.247.21.63:3133	-1	MISSING	00m:00s	1970-01-01 00:00	

Verify now that your MN are shown in the Masternodes tab.

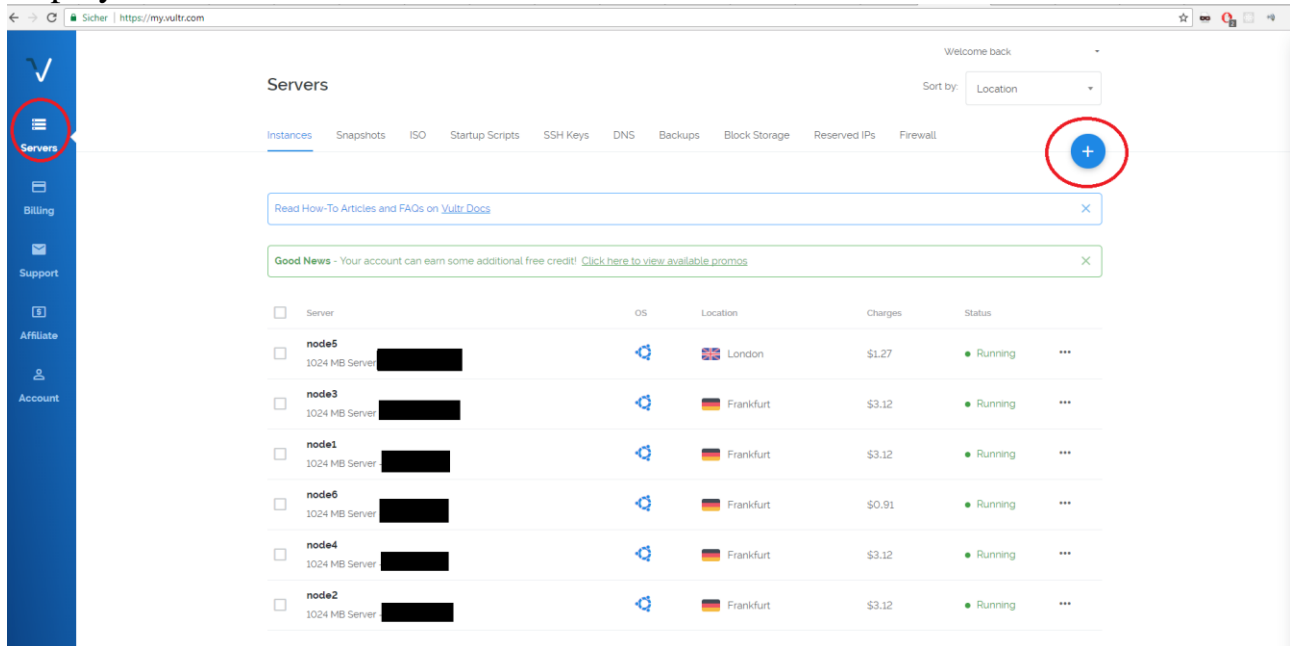
Getting a VPS

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.

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6. Deploy the server



Hit the plus top right to add new instances

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

2 Server Type

64 bit OS 32 bit OS Application Upload ISO ISO Library Backup Snapshot

CentOS
SELECT VERSION

CoreOS
Stable x64

Debian
SELECT VERSION

Fedora
SELECT VERSION

FreeBSD
SELECT VERSION

OpenBSD
6 x64

Ubuntu
SELECT VERSION

17.10 x64
16.04 x64
14.04 x64

Windows
SELECT VERSION

3 Server Size

Temporarily Sold Out

20 GB SSD

\$2.50/mo
\$0.004/h

1 CPU
512MB Memory
500GB Bandwidth

25 GB SSD

\$5/mo
\$0.007/h

1 CPU
1024MB Memory
1000GB Bandwidth

40 GB SSD

\$10/mo
\$0.015/h

1 CPU
2048MB Memory
2000GB Bandwidth

Servers Qty: Summary: **\$5.00/mo** (\$0.007/hr) [Deploy Now](#)

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

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- 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/APR/setup.sh
chmod 755 setup.sh
./setup.sh
```

This process is interactive and takes several minutes.

```
root@CORF :~# chmod 755 setup.sh
root@CORE :~# ./setup.sh
*****
* Ubuntu 16.04 is the recommended opearting system for this install.      *
*                                                                           *
* This script will install and configure your APR 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)

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```
Configure your masternodes now!
Type the IP of this server, followed by [ENTER]:
199.247.21.63

Enter masternode private key for node
2ZB1ESe4K32DXunJQWWgRvVSEcTVdW328xr69rruHxFg2uEqCzW
Skipping adding existing rule
Skipping adding existing rule (v6)
APR Coin server starting
root@CORE :~#
```

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 it works type “aprcoin-cli getinfo” and “aprcoin-cli mnsync status”

```
root@CORE :~# aprcoin-cli getinfo
{
  "version": 1010006,
  "protocolversion": 70912,
  "walletversion": 61000,
  "balance": 0.00000000,
  "blocks": 1925,
  "timeoffset": 0,
  "connections": 17,
  "proxy": "",
  "difficulty": 17398.47991736039,
  "testnet": false,
  "moneysupply": 3001724.99636120,
  "keypoololdest": 1524592163,
  "keypoolsize": 1001,
  "paytxfee": 0.00000000,
  "relayfee": 0.00010000,
  "staking status": "Staking Not Active",
  "errors": ""
}
root@CORE :~#
```

```
root@CORE :~# aprcoin-cli mnsync status
{
  "IsBlockchainSynced": true,
  "lastMasternodeList": 1524592298,
  "lastMasternodeWinner": 1524592510,
  "lastBudgetItem": 0,
  "lastFailure": 0,
  "nCountFailures": 0,
  "sumMasternodeList": 100,
  "sumMasternodeWinner": 930,
  "sumBudgetItemProp": 0,
  "sumBudgetItemFin": 0,
  "countMasternodeList": 5,
  "countMasternodeWinner": 3,
  "countBudgetItemProp": 5,
  "countBudgetItemFin": 5,
  "RequestedMasternodeAssets": 999,
  "RequestedMasternodeAttempt": 0
}
root@CORE :~#
```

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

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- b. If sync is finished go to your desktop wallet and start MNs in the masternode tab (unlock wallet before). After starting it should look like this:



APR Coin

Achtung: Der Status Ihrer Masternodes kann in der lokalen Wallet leicht inkorrekt sein. Warten Sie immer bis die Wallet vollständig synchronisiert ist und überprüfen Sie von einer anderen Installation aus, sollte Ihre Masternode immer noch als "MISSING" angezeigt werden.

Name	Adresse	Protokoll	Status	Aktiv	Zuletzt gesehen (UTC)	Öffentlicher Schlüssel
MNI	199.247.21.63:3133	-1	ENABLED	32m:32s	1970-01-01 00:00	

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

```
root@CORE-10:~# aprcoin-cli masternode status
{
  "txhash": "a33e0b17f667111221c1441fb90a22d3c9d1cfdb4f62e33cd12",
  "outputidx": 0,
  "netaddr": "140.101.20.20:3133",
  "addr": "6CveLEopVtiC9W3qLAFoegg63rRiPsKTQe",
  "status": 4,
  "message": "Masternode successfully started"
}
```

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