

# MASTERNODE GUIDELINE



by Urs from Malta

VERSION 1.23

# *SCIENTIA POTENTIA EST*

*Sir Francis Bacon*

*« Knowledge is Power »*

*Masternoding can be very lucrative, but as always the devil lies in the details. A healthy mix between noding the right coins with high yield versus those that provide lower but steady returns and are not as volatile is the way to go.*

*We have been masternoding since the technology came up and will gladly assist in the coinfinding process!*

*If you enjoy this guide,  
feel free to share it and pass it along!*

*Sincerely,  
Urs from beautiful Malta*

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## Introduction

This guide allows you to setup and run a masternode. Depending on the masternode and personal IT- and blockchain experience, 2-3 hours must be planned for the installation.

**15%**

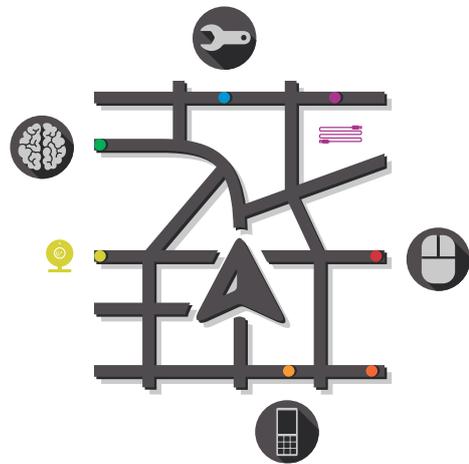
Well configured masternodes can generate over 15% yield per month. But besides the configuration a permanent monitoring is necessary.

If you don't have time for the setup, we can help you. You can reach us as follows:

- Email : [betatest@yieldnodes.com](mailto:betatest@yieldnodes.com)
- Skype: [steve25m](#)

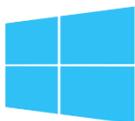
### The following knowledge levels are necessary

Economy/Trade	:	Good
Microsoft Windows	:	Good
Linux	:	Basic
Crypto currencies	:	Good
Blockchain	:	Basic
Computer Security	:	Good



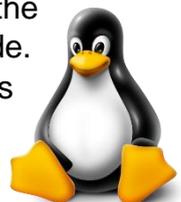
## Basic information

A Masternode which is secured according to the current technical state consists of 2 components, the server, which is also called "Hot Wallet" and the real Wallet also called "Cold Wallet".



Both wallets can run on Linux and Windows. However, it is common for the Cold Wallet to run on Windows and the Hot Wallet to run on a Linux VPS.

The Hot Wallet, whose data and IP addresses can be seen open in the blockchain, executes the actual full node functions of the master node. It is therefore potentially very vulnerable and does not hold any coins in its wallet for this reason. The coins, both the stake and the rewards, are held by the cold wallet. This usually runs on a shielded computer, which is not visible from the outside.



## Project Analysis

The developer team of the masternode coin normally provides the necessary technical requirements, the wallet software, the Linux setup script and other information, which are necessary to setup the masternode, on one or all these places:

- project website
- github.com
- bitcointalk.org



The study of the website is also necessary to know the chances of the project behind the coin. You should also check on which exchanges the coin is traded and analyze there the price developments, turnovers and market capitalization.

MasterNodes.online (<https://masternodes.online>) is a good help, but not always complete.



Not only the ROI should be the criterion for the evaluation of a master node. A high ROI without corresponding trading volumes or even without exchangeability at exchanges is worthless. The potential compound interest effect should also not be underestimated. This means that master nodes with lower stakes can quickly become significantly more profitable.

## Setup Hot Wallet - Part 1

We recommend starting with the installation of the Hot Wallet. You will need a Virtual Private Server (VPS) from a provider.

### Recommendation

Hetzner (Germany) <https://hetzner.com>

VULTR (USA) <https://vultr.com>

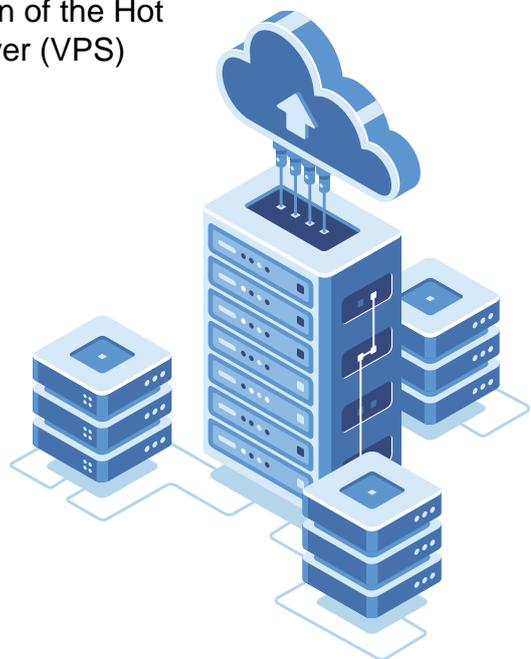
VIRMACH (USA) <https://virmach.com>

For most Masternode Hot Wallets the following configuration is enough:

- 1 vCPU
- 2GB RAM
- 20GB SSD
- static public IP

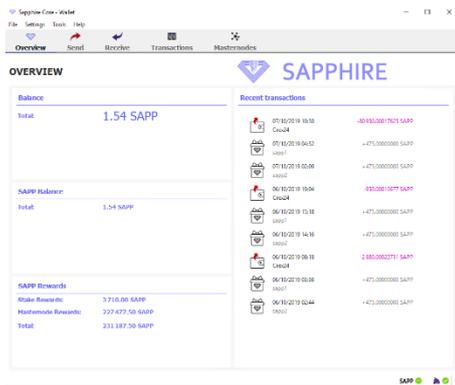
As the traffic is not high, therefore the smallest contingent is enough. Some master nodes require 4GB RAM.

Depending on the provider and the specification of the masternode, such a server costs between € 3 and € 10 per month.





## Wallet



The installation of the Wallet under Windows is described here. It is also possible to install the wallet under Linux, but this is not described here.

You can get the corresponding wallet software from the developers on their website or from [github.com](https://github.com). Like any Windows application, it can be set up relatively easily.

The Cold Wallet holds the coins of the stakes and receives the rewards earned through the operation of the masternodes. In the Cold Wallet the masternodes are configured and activated and the private keys are generated.

The Cold Wallet can be used to monitor the masternodes. It does not have to run constantly, the masternodes run even without the cold wallet is being online.

Before you configure your wallet for the operation of masternodes, you should ensure that your wallet is properly configured and secured.

## Stakes

For the operation of the masternodes it is necessary to block a stake. The stake turns the fullnode into a masternode. This happens in the cold wallet.

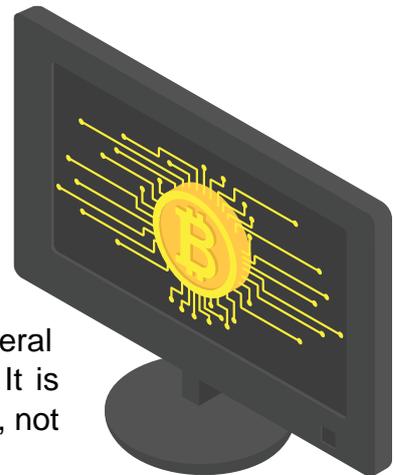
The height of the stake can be found in the project description or on [MasterNodes.online](https://MasterNodes.online).

To block the stake for the masternode it must be sent from the wallet to itself. (Masternode Collateral Transaction). So, you send the coins to yourself. It is important that it is exactly the given number of coins, not less, but also not more.

## Console

Inside the wallet there is a so-called console. There you can enter console commands, which return results, which you need for the configuration of the wallet and the masternode.

The main console commands are largely identical for all wallets.



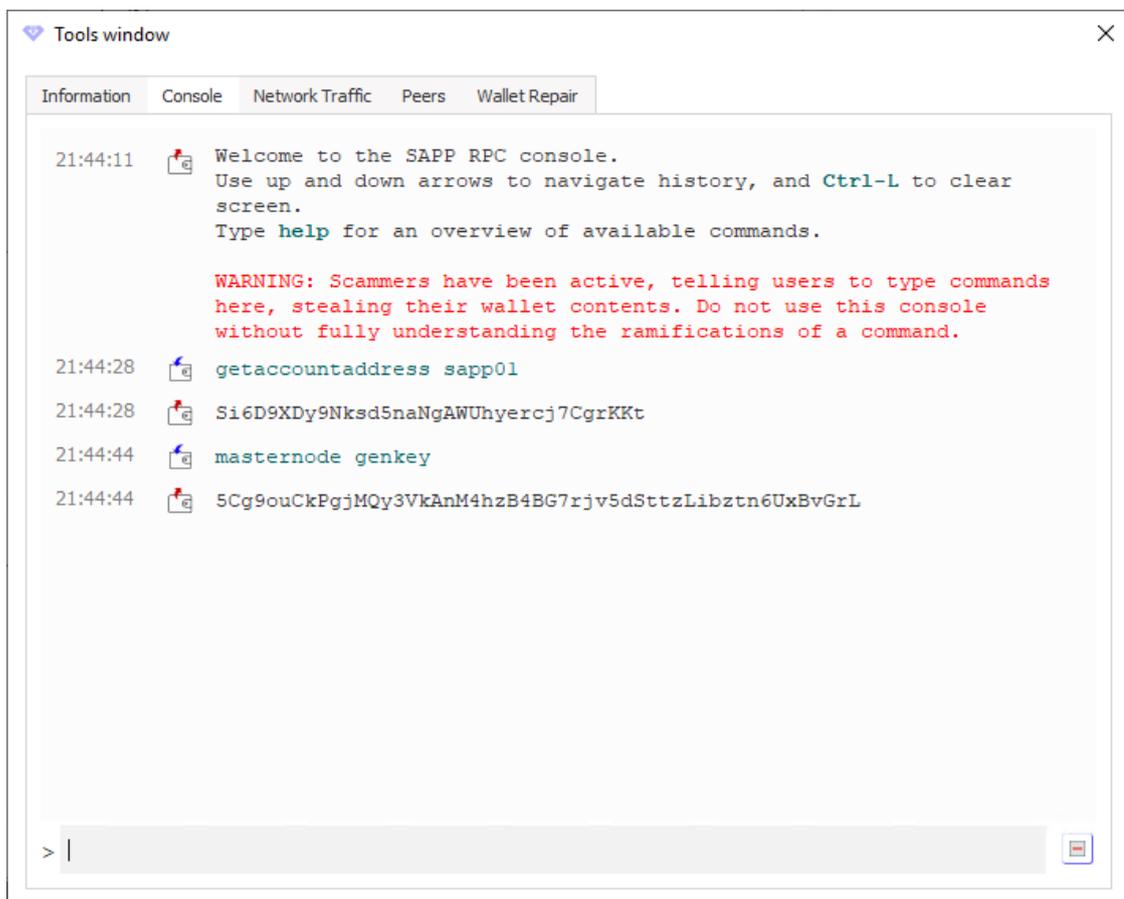
## Masternode Collateral Transaction (MCT)

First you should get an address for the MCT, this is done by the console command "getaccountaddress [alias]". The alias should be the name for the masternode.

The console returns a transfer address. With this address you can make the necessary transfer by sending the required stake there. It makes sense to give the transfer a name (label) with reference to the masternode, as the rewards will be booked later under the same name, especially if you want to operate several masternodes.

## Masternode configuration inside the Cold Wallet

Once the first confirmations have been received, the next command can be entered in the console: "masternode outputs". As the result, the transaction ID of the MCT is returned together with the corresponding index (1 or 0). This result is to store.



```
Tools window
Information Console Network Traffic Peers Wallet Repair
21:44:11 Welcome to the SAPP RPC console.
Use up and down arrows to navigate history, and Ctrl-L to clear
screen.
Type help for an overview of available commands.
WARNING: Scammers have been active, telling users to type commands
here, stealing their wallet contents. Do not use this console
without fully understanding the ramifications of a command.
21:44:28 getaccountaddress sapp01
21:44:28 Si6D9XDy9Nksd5naNgAWUhyercj7CgrKKt
21:44:44 masternode genkey
21:44:44 5Cg9ouCkPgjMQy3VkJAnM4hzB4BG7rjv5dSttzLibztn6UxBvGrL
> |
```

The next command in the console is: "masternode genkey". The result is the private key of the masternode. This key should also not be handled carelessly, but since no coins are held in the hot wallet, it does not play as big a part for security as the private key of the cold wallet. This result is also to store.

## masternodes.conf

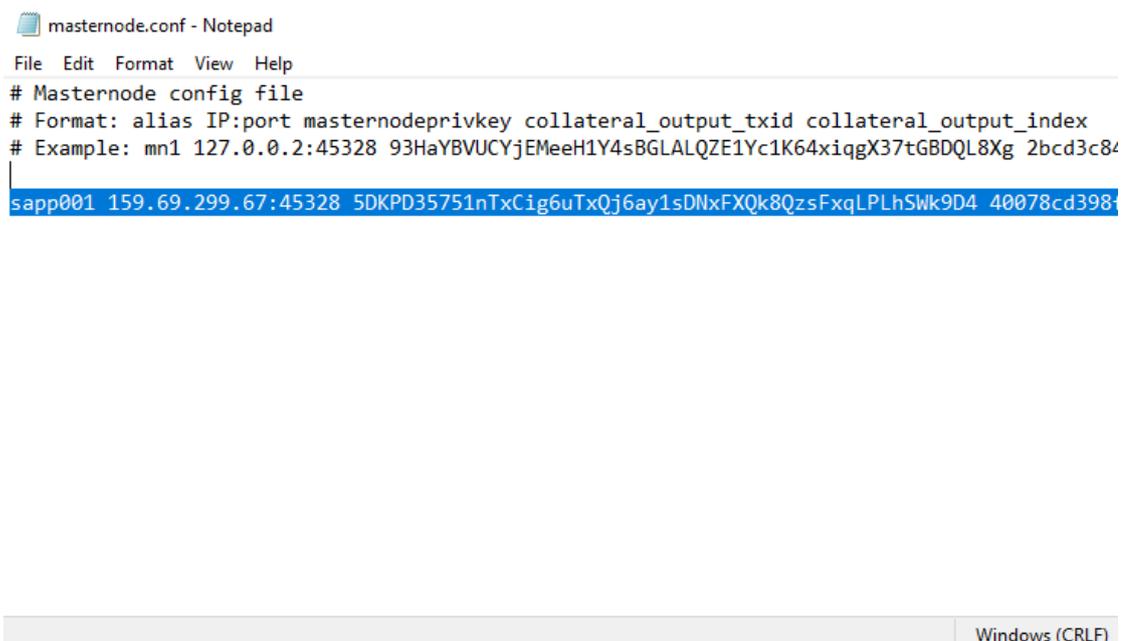
After this information has been inquired and stored, the masternode can be defined in the wallet. For this there is usually a menu item in the wallet like "Open Masternode Configuration File". This opens the text file masternode.conf, which is in the data directory of the wallet. If there is no such menu entry, the masternode.conf must be opened with an editor.

Behind the example entries, which all begin with "#", you can define the masternode. The last of the example entries shows the form.

First comes the alias that identifies the master node. One often takes the abbreviation of the coin plus a consecutive number.

Then comes the IP with port number of the master node, which was previously stored during the configuration of the Hot Wallet. The port number you will find in the masternode description of the coin.

At last the stored private key, the stored transaction ID and the stored transaction index must be added, and the master node is defined.



```
masternode.conf - Notepad
File Edit Format View Help
# Masternode config file
# Format: alias IP:port masternodeprivkey collateral_output_txid collateral_output_index
# Example: mn1 127.0.0.2:45328 93HaYBVUCYjEMeeH1Y4sBGLALQZE1Yc1K64xiqgX37tGBDQL8Xg 2bcd3c84
sapp001 159.69.299.67:45328 5DKPD35751nTxCig6uTxQj6ay1sDNxFXQk8QzsFxqLPLhSWk9D4 40078cd398
```

Windows (CRLF)

Now restart the wallet and the masternode can be watched in the wallet. The masternode has now the status MISSING.

## Setup Hot Wallet - Part 2

After the configuration of the masternode, the software for it must be installed on the VPS. Please ensure that this masternode (hot wallet) is not started until the MCT has at least 20 confirmations.

Usually the installation script with instructions can be found on the website or github.com which must be executed on the VPS. Normally the script is self-explanatory and asks for the private key that was created in the wallet before.

As soon as the script is executed, the masternode can be started. At the first start the blockchain must be completely loaded. Depending on the blockchain size, this can take from a few minutes to several hours. At the next start the blockchain must only be synchronized, which needs only some minutes.



## Administration of the masternode in the wallet

Now the masternode can be activated in the wallet and the first rewards can be received. As a rule, the first reward comes after three times the time that rewards are normally paid. The Masternode (Hot Wallet) must always run and be online for the rewards to be earned. The wallet does not have to run.

The average reward frequency can be found on [masternodes.online](https://masternodes.online)

## Links

- Data of all master nodes : <https://masternodes.online>
- Support Website : <https://github.com/>
- Blockchain Forum : <https://bitcointalk.org>
- Masternode Provider : <https://yieldnodes.com>
- VPS Provider
  - Hetzner (Germany) <https://hetzner.com>
  - VULTR (USA) <https://vultr.com>
  - VIRMACH (USA) <https://virmach.com>

If there are any questions, don't hesitate to contact us:

- Email : [betatest@yieldnodes.com](mailto:betatest@yieldnodes.com)
- Skype : [steve25m](#)

