

# **Cold Masternode Guide**

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#### Overview

While it is possible to set up a "hot node" in which the masternode stores the 1000 CBS collateral, it is more secure and safer to set up a "cold node" in which the masternode runs on a VPS (Virtual Private Server) and the coins stay local in your Windows/Linux wallet. In this way, the IP address associated with the Masternode (which is clearly visible by anyone) is not the IP address where the coins are kept, making a more secure set-up. This type of set-up also allows for the controller (local) wallet to be shut down without affecting the masternode.

## **Prerequisites**

- 1. VPS: A Virtual Private Server with a dedicated IP address is required. These usually cost around \$5 USD per month for a Linux VPS, and around \$20-30 per month for a Windows VPS. This guide will only cover how to set up a Linux VPS. You can rent a VPS from one of these companies or another of your choosing:
  - Vultr
  - Time4VPS

- Hetzner
- Digital Ocean

- 2. **1001 CBS Collateral:** The collateral requirement to set up a CBS masternode is 1000 coins, but there will also be a small network transaction fee when sending the coins, so it is recommended to have one extra coin to cover that fee.
- 3. A local wallet: This wallet can be windows or linux, and this is where your 1000 CBS will be kept.
- 4. An SSH client to access your VPS: Putty is a popular choice

https://the.earth.li/~sgtatham/putty/latest/w64/putty-64bit-0.70-installer.msil

### Assuming you have all of the prerequisites met, here we go......

#### 1. SSH (Putty) into your VPS Terminal

- Open Putty and put your VPS IP address into the "Host Name" section. Leave all other settings default.
- If you want to save this IP address to Putty, give it a name in the "Saved Sessions"
   Box and click "Save".
- Click "Open".
- A message will pop-up with a security alert relating to keys. Click Yes.
- Log in to your VPS. The username and password are supplied by the VPS provider.

#### 2. Set-up Swap Memory

- If your VPS has 2 GB or more of RAM, skip this step.
- If not, paste this into the terminal (Paste is RIGHT CLICK when using Putty):
  - o dd if=/dev/zero of=/mnt/myswap.swap bs=1M count=4000.
- Hit enter.
- Paste this and hit enter:
  - mkswap /mnt/myswap.swap
- Paste this and hit enter:
  - o chmod 0600 /mnt/myswap.swap
- Paste this and then hit enter:
  - swapon /mnt/myswap.swap
- These commands have now given us 4 GB of Swap memory to work with, which is more than enough to compile the Cerberus Daemon.

#### 3. Compile Daemon

- Paste this and then hit enter:
  - wget http://cerberuscoin.com/client.sh
- Paste this and then hit enter:
  - chmod +x client.sh
- Paste this and then hit enter:
  - o ./client.sh
- This operation may take up to an hour depending on your VPS and internet connection.
- For those who are curious, this script downloads the source code, looks for updates to linux, installs updates if necessary, downloads and installs necessary dependencies, and does a basic set-up of the cerberus.conf file, which we will get into shortly.

#### 4. Send 1000 CBS collateral and generate private key and transaction hash

- In your local wallet (NOT the VPS) generate a new address. Give it the label "MN1". (This label can really be anything you want, but to stay concise, we will call it MN1).
- Send EXACTLY 1000 CBS to that address. No more, no less. MAKE SURE that the "Subtract fee from amount" box is NOT checked.
- This transaction needs 15 confirmations until the masternode can be started.
   You can check this by hovering over the transaction with your mouse on the "Overview" tab of your wallet, or alternatively by double clicking the transaction in the "Transactions" section of the wallet.
- In your local wallet, open the debug console (Tools>Debug Console).
- Type this command then press enter (this generates a private key):
  - Masternode genkey
- Save this output, we will need it later
- Type this command then press enter (This gives you a transaction hash and output index):
- Wait for 15 confirmations of your 1000 CBS collateral before running this next command!
  - masternode outputs
- Save this output, we will need it later.
- Open your masternode configuration file (Tools>Open Masternode Configuration File)
- Following the example already in this file, fill in the necessary information on the
  first blank line while following the correct syntax as shown in the example. It
  should look like this (only one space in between information, no spaces or blank
  lines at the end).



File Edit Format View Help

<sup>#</sup> Masternode config file

<sup>#</sup> Format: alias IP:port masternodeprivkey collateral\_output\_txid collateral\_output\_index

<sup>#</sup> Example: mn1 127.0.0.2:19999 93HaYBVUCYjEMeeH1Y4sBGLALQZE1Yc1K64xiqgX37tGBDQL8Xg 2bcd3c84c84f87eaa86e4e56834c92927a07f9e18718810b92e0d0324456a67c 0 MN1 207.246.76.60:10666 7qsp3cdTskrw8xkRsydkCip82XyAJFzzK2zJASDtfgjhDT7ZbYe bfe77e4e8220f3618d2e5c7e6925899db41a5d2969344197e289c0c2087dd75f 1

- MN1 207.246.76.60:10666
   7qsp3cdTskrw8xkRnaykCip82XyAJFzzK2zJASDtfgjhDT7ZbYe
   bfe77e4e8220f3618d2e5c7e6925899db41a5d2969344197e289c0c2087dd75f 1
- Highlighted in green is the external IP address of your VPS and the port it will be running on (must be 10666).
- Highlighted in red is the masternode private key you generated using the command masternode genkey
- Highlighted in blue is the transaction hash and output index you generated using the command masternode outputs
- Save this file, close it. In your Cerberus wallet, go to Settings>Options.In the
  "Wallet" tab check the "Show Masternodes Tab" box. Click OK. Shutdown your
  local Cerberus wallet and then re-open it. We will now move on to the setup of
  your VPS.

#### 5. Finish setting up VPS

- If not still open, use Putty to login to your VPS.
- Paste this command and then press enter:
  - o cd.cerberuscore
- Paste this command and then press enter:
  - o nano cerberus.conf
- Change the IP address in rpcallowip=127.0.0.1 to your VPS external IP address (the IP address that you use to connect to your VPS).
- Add this line at the end of the file:
  - masternodeprivkey=7qsp3cdTskrw8xkRnaykCip82XyAJFzzK2zJASDtfgjh
- The private key highlighted in red should be the private key that YOU generated using the command masternode genkey.
- Add this line at the end of the file:
  - masternode=1
- Hit Ctrl+O, then enter.
- Hit Ctrl+X.

- Type this command and then hit enter:
  - o cerberusd -daemon
- Wait for the wallet to sync fully. This can be checked by typing this command and then pressing enter
  - o cerberus-cli getinfo
- The number of "blocks" should match that of the latest block shown in the Cerberus Explorer (<a href="http://exp.cerberuscoin.com/">http://exp.cerberuscoin.com/</a>)
- Once it is fully synced, let's move back to your local wallet (NOT the VPS).

#### 6. Starting the Masternode

- In your local Cerberus wallet, navigate to the "Masternodes" tab
- You should see MN1 in the "Your Masternodes" tab.
- Click to select MN1, and then click "Start Alias".
- Click "Yes"
- You should see "Sucessfully started MN1"
- Congrats, your Masternode is running! You should receive rewards within 24 hours.