**UBUNTU MN GUIDE: How to Run a PZDC Masternode on a Linux VPS**

General Notes

To run your first masternode, you must have 25000 PZDC coins in your PZDC wallet, a Linux VPS server (the guide describes how to set it up), and Windows/Linux/Mac operating system installed on your local PC. By default, the guide shows commands for Windows local PC. Commands for Linux and Mac are given as well.

1. **Collateralize your 25000 PZDC coins.**

Download the PZDC wallet from the official website and let it synchronize with the network. When it's ready, you will see a red check in the bottom right corner.
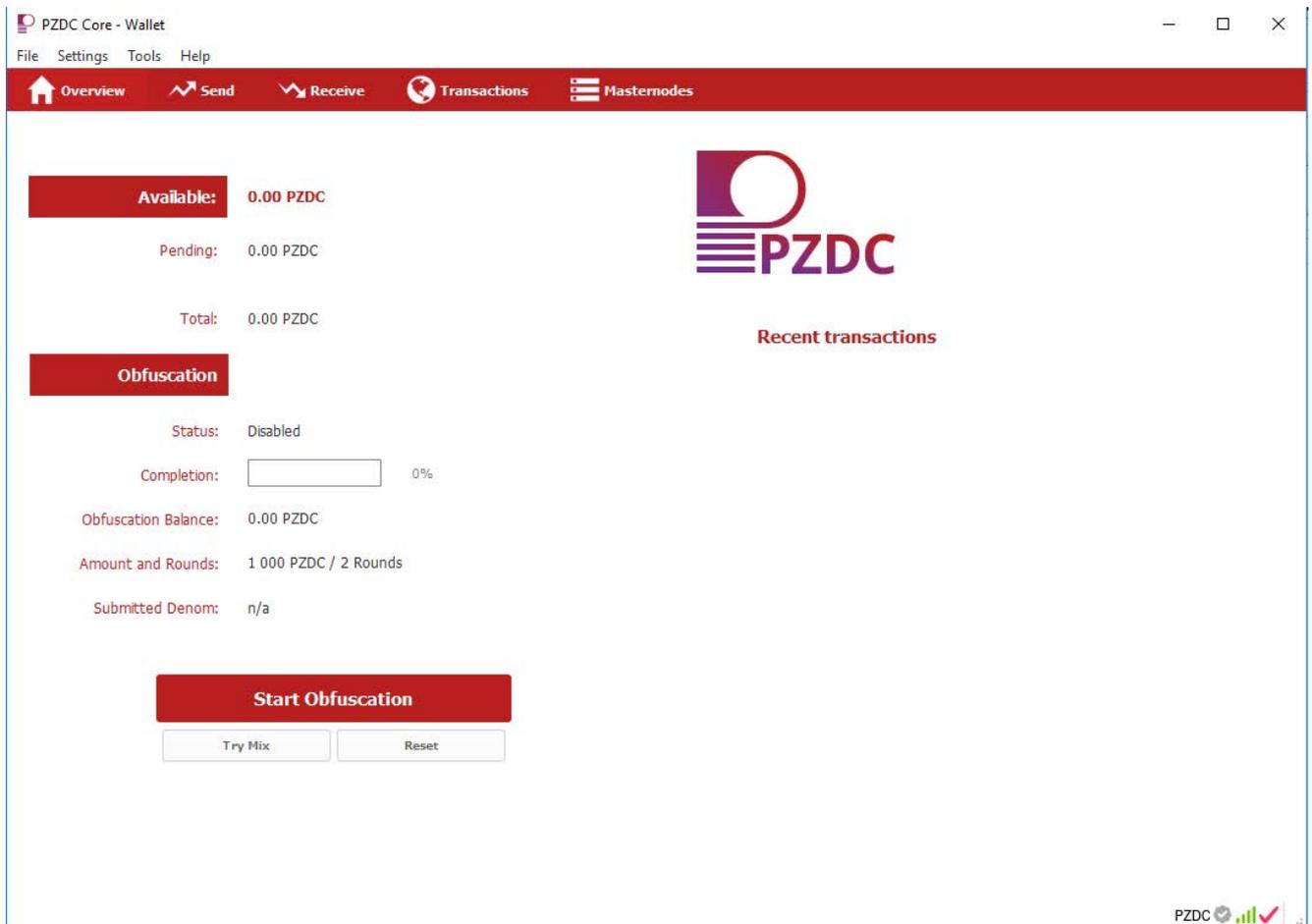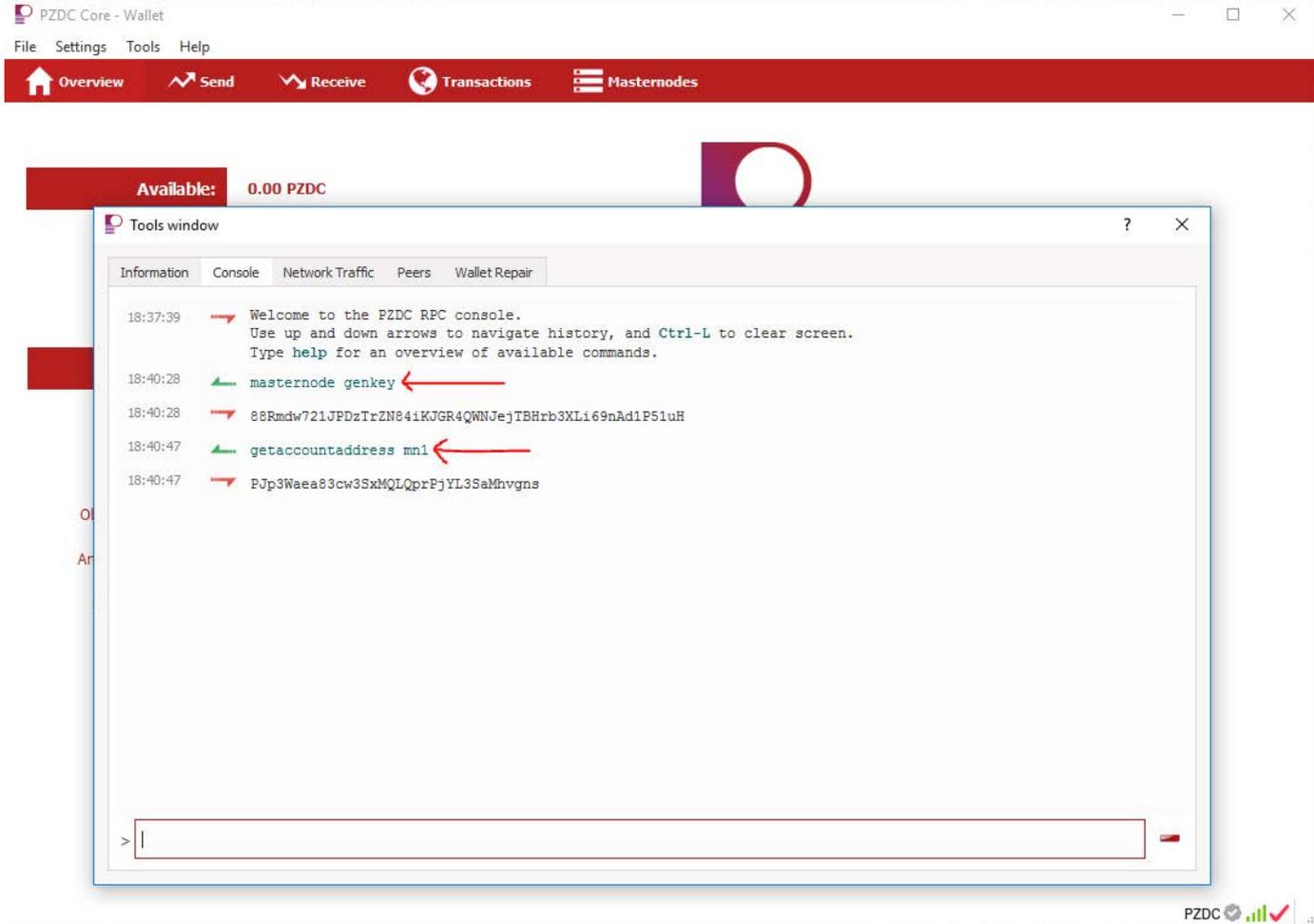

Open Debug console (**Tools->Debug console**) and type the next command to generate your masternode key:

masternode genkey

Then get your address for collateral:

getaccountaddress mn1

Save your masternode key and collateral address, and then send 25000 PZDC coins to your collateral address.

Wait for the transaction to get completed, and then type the next command in Debug Console:

==masternode outputs==

Save TXID and UTXO. 16 confirmations needed to run a masternode. While you are waiting for them to be done, you can set up a VPS server.

2. Set Up a VPS

To set up a VPS, you can use Google Cloud, DigitalOcean, Choopa, OVH, etc. The guide uses Vultr as the most popular choice.

Create your account and then
  a) Choose server location in **Server location.**
  b) Choose Ubuntu 16.04 x64 in **Server Type**.
  c) Choose a server with enough memory reserve in **Server Size (**at least 1GB of memory).

Server Location

Server Type

Server Size

<mark>Make sure to also enable ipv6</mark>

Then choose the server hostname and label. We use PZDC_MN for both.

Wait for a couple of minutes required for Vultr to install your server. Once the installation is complete, click **Manage** and save the server IP Address, your Username, and Password.

Location:	🇳🇱 Amsterdam
IP Address:	⬚⬚⬚⬚⬚⬚⬚ 🗗
Username:	root
Password:	•••••• 👁 🗗

3. Prepare Your Local Operating System

Download Putty by the link: https://putty.org/ and choose the MSI installer according to your operating system. If you use Linux or Mac, you can ssh right from the terminal by typing ssh root@<server_ip> and entering your password.

After you download and install Putty, run it from the Start Menu. In Host Name, enter the server IP address and click Open. A security alert will appear; choose Yes to trust the server in future.

Once you connect to the server, please log in to the server using root username and the password given by your VPS provider.

Now you will be given further instructions. Copy the commands One by One, not entirely.

3.1 Run Putty, log in to VPS under root, and enter these commands:

1.   git clone https://github.com/pzdc-project/vps.git && cd vps

2.   ./install.sh -p pzdc

Note: for advanced users you can install more than 1 mn on 1 vps if you know how   to use ipv6 or have multiple ipv4 addresses. folow this setup here https://github.com/pzdc-project/vps/blob/master/README.md

3.2 edit the the configuration file after install is complete enter this command:
note: if you installed more than 1 mn on the advanced user setup change the "n1 " to its corresponding number.

nano /etc/masternodes/pzdc_n1.conf

Add your VPS IP where it says bind= [#NEW_IPv4_ADDRESS_FOR_MASTERNODE_NUMBER:::1] remove the brackets

```
######################################
# basic settings
######################################
txindex=1
logtimestamps=1
listen=1
daemon=1
staking=0
gen=0
maxconnections=256
bind=[#NEW_IPv4_ADDRESS_FOR_MASTERNODE_NUMBER:::1]:21212
```

to look like this:

```
bind=66.42.32.208:21212
```

Next add your Masternode Privkey/Genkey into the config file where it says masternodeprivkey=here_goes_your_masternode_key_for_masternode_pzdz_1 replaceing the text there.

to look like this:

Next Press CTRL+X then Press Y then Press ENTER so save.

3.3 optional bootstrap: sudo wget https://goo.gl/hrAx9f && sudo mv hrAx9f /var/lib/masternodes/pzdc1/bootstrap.dat

3.4 Starting the masternode wallet:

/usr/local/bin/activate_masternodes_pzdc

once done wait for it to sync with the blockchain by comparing blocks to http://explorer.pzdc.org use command: /usr/local/bin/pzdc-cli -conf=/etc/masternodes/pzdc_n1.conf getinfo to check the blocks, Now return to local wallet and move to step 4.

4. In local wallet go to Tools->Open Masternode Configuration File. Run it

via notepad.exe, and then add a new line with the next settings:

address_label vps_ip:21212 masternode_genkey masternode_outputs-txhash masternode_outputs-outputidx

Note the:syntax in masternode.conf

Example:

```
# Masternode config file
# Format: alias IP:port masternodeprivkey collateral_output_txid collateral_output_index
# Example: mn1 127.0.0.2:21212 93HaYBVUCYjEMeeH1Y4sBGLALQZE1Yc1K64xiqgX37tGBDQL8Xg 2bcd3c84c84f87eaa86e4e56834c92927a07f9e18718810b92e0d0324456a67c 0
MN1 68.23.105.185:21212 88doL4NNfWHoFGLnpdHn8q6sYZYJCvGDxFd8Ba64r2ttBpvgkqd e97e29386143b511851af12e43fe6133f3862575fe948bed3aa433166b1d272a 0
```

address_label is the name used when you created a new wallet address
vps_ip is the IP address of your VPS;
masternode_genkey is your MN private key obtained in step 1.
masternode_outputs-txhash is the txhas obtained in step 1.
masternode_outputs-outputidx is the outputidx number obtained in step 1.

4.2 Close then Re-run the PZDC-Qt wallet and go to the "Masternodes" tab to check if the new masternode is "Missing." Then go to tools->Debug console and type startmasternode alias 0 "the-masternode-name" without quotes to enable your MN.

NOTE: To check your MN status, type the next line in Putty replacing "n1" with your #
/usr/local/bin/pzdc-cli -conf=/etc/masternodes/pzdc_n1.conf masternode status

Status 4 is good.

```
    "status" : 4,
    "message" : "Masternode successfully started"
}
```

Here are some useful vps commands:
remember to replace the pzdc_n1 with your number

edit config:
nano /etc/masternodes/pzdc_n1.conf

getinfo:
/usr/local/bin/pzdc-cli -conf=/etc/masternodes/pzdc_n1.conf getinfo

Check Masternode Status:
/usr/local/bin/pzdc-cli -conf=/etc/masternodes/pzdc_n1.conf masternode status

stop daemon:
/usr/local/bin/pzdc-cli -conf=/etc/masternodes/pzdc_n1.conf stop

start daemon:
/usr/local/bin/activate_masternodes_pzdc