



# PUSHI Coin Masternode Guide

By PUSHI Beast

## What you will need:

- More than 1000 PUSHI
- One computer with [pushi-gt](#) wallet installed. Make sure the wallet contains the Masternode Collateral of at least 1000 PUSHI
- One VPS.
- A decent amount of technical knowledge. i.e. Knowing what a VPS is and using basic Linux shell commands.
- Patience - enough to follow these instructions properly before asking questions!

## Step 1:

Setup your Pushi wallet - this will keep your coins safe.  
Install pushi-qt wallet on Windows or Linux from the official [releases](#).

1.1: Load your pushi-qt wallet and sync.

1.2: Set a password for pushi-qt.  
(Wallet will shut down)

1.3: Find your *wallet.dat* file:  
*e.g. c:\Users\username\AppData\Roaming\PushiCore* (windows file path)

1.4: Backup your private keys and *wallet.dat* file!  
(Very important! You may lose your coins if you don't backup!)

1.5: Exit the wallet application and then re-open it. Let it synchronize.

## Step 2:

Accessing the debug console in the QT-wallet

2.1: Open the Debug Console.

2.2: Click Tools on the top file menu.

2.3: Open Debug console.  
(Illustration 2.2)

2.4: Click Console on the top Tab Bar.

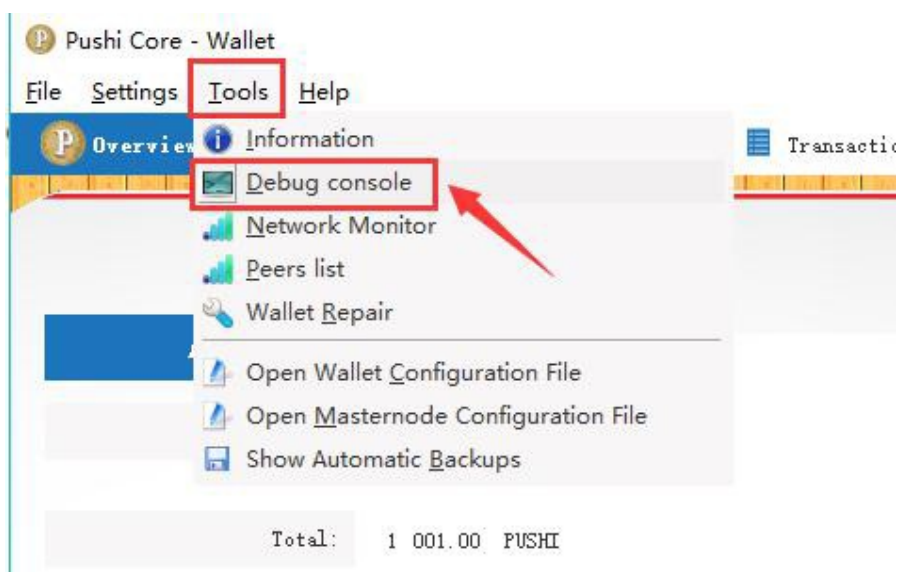


Illustration 2.2

### Step 3:

Obtaining your masternode genkey & address

3.1: In the debug console command box (bottom of the window) enter the following:

```
masternode genkey
```

3.2: You should see something very similar to this. It's your **MN\_GENKEY** (save into a text file in Notepad or Gedit/Nano/etc,(see Illustration 3.2 below):

```
<-masternode genkey
```

```
->93HaYBVUCYjEMeeH1Y4sBGLALQZE1Yc1K64xiqgX37tGBDQL8Xg
```

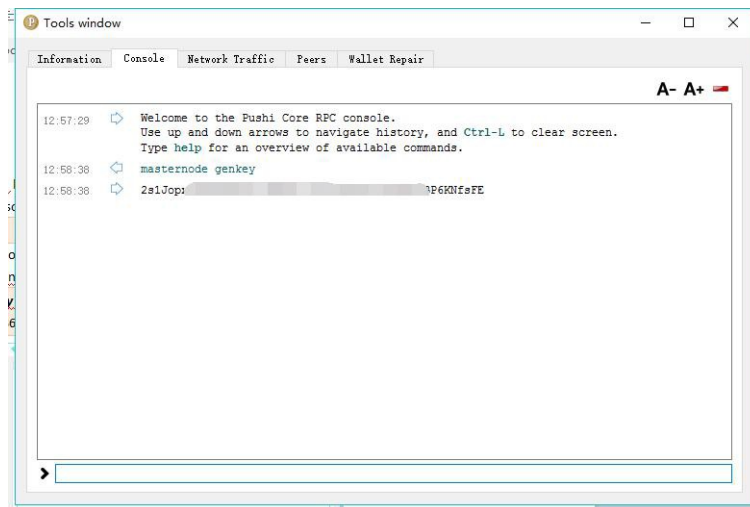


Illustration 3.2

```
getaccountaddress <MN1>
```

3.3: Enter the following to create a masternode address (ENTER):  
(Replace <MN1> with your **MASTERNODE\_ALIAS\_NAME**.)

```
<-getaccountaddress <MN1>
```

```
->PVRQRXGoRP9oEMSCW7e28dLjoKsCMQCEp
```

3.4: You should see something very similar to this (save into a text file in Notepad or Gedit/Nano/etc, Illustration 3.4):

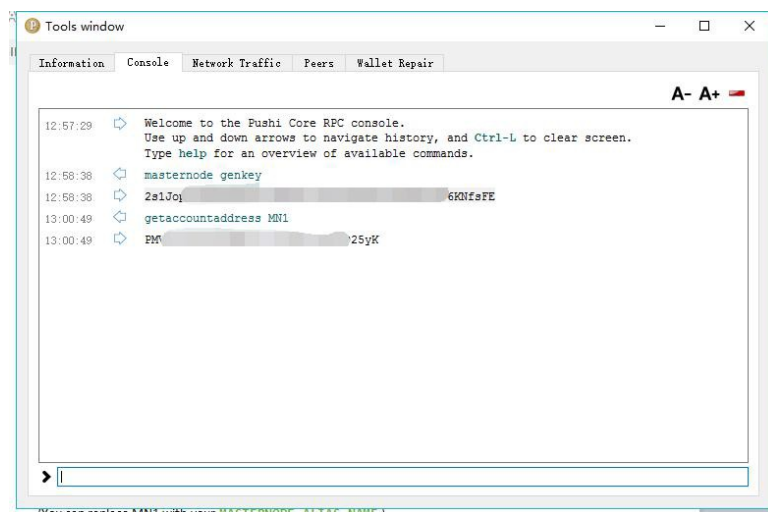


Illustration 3.4

## Step 4:

Wallet set up for masternode

### 4.1: Open your Pushi Qt-Wallet

4.2: Click Send Tab (see Illustration 4.2)

4.3: Send 1000 PUSHI to the address [MASTERNODE\_ALIAS\_NAME]

4.3: Wait for ALL confirmations to complete (See the Transactions tab in wallet for more details).

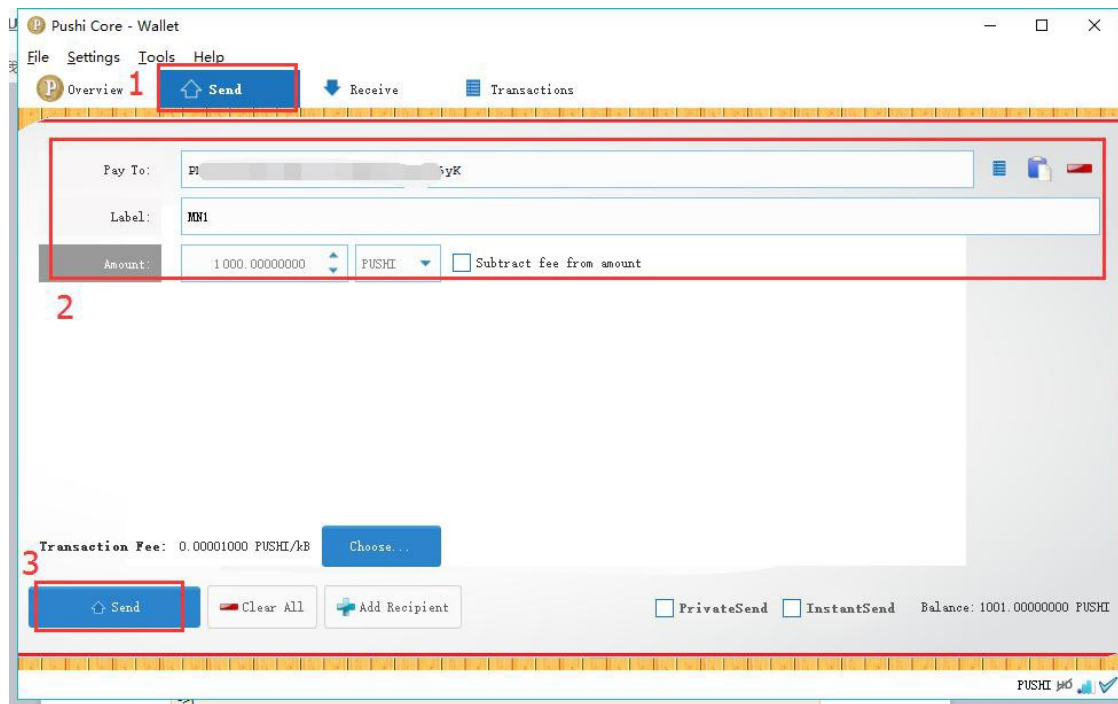


Illustration 4.2

4.4: Open Debug console once more (see step 3 instructions on accessing this).

4.5: Enter the following to get outputs( ENTER):

```
masternode outputs
```

4.6: You should see something very similar to this (save into a text file in Notepad or Gedit/Nano/etc):

```
<-masternode outputs
->{
  "2bcd3c84c84f87eaa86e4e56834c92927a07f9e18718810b92e0d0324456a67c":0
}
```

They are your TX\_ID and TX\_INDEX, { "TX\_ID": "TX\_INDEX" }

4.7: Open the options menu in your wallet and enable the masternode tab. This will allow you to see you Masternodes easily via the Graphical User Interface (GUI) of the wallet. You can also use this once you have completed all steps to start nodes.

## Step 5:

Edit "masternode.conf" file

5.1: Find your *masternode.conf* file

*For example - In windows, it would be located in the following directory:*

*c:\Users\username\AppData\Roaming\PushiCore*

5.2: Open *masternode.conf* with Notepad, You should see something very similar to this:

```
# Masternode config file
# Format: alias IP:port masternodeprivkey collateral_output_txid collateral_output_index
# Example:
mn1 127.0.0.2:19847 93HaYBVUCYjEMeeH1Y4sBGLALQZE1Yc1K64xiqgX37tGBDQL8Xg
2bcd3c84c84f87eaa86e4e56834c92927a07f9e18718810b92e0d0324456a67c 0
```

5.3: Format your masternode information:

```
MASTERNODE_ALIAS_NAME VPS_IP:9847 MN_GENKEY TX_ID TX_INDEX
```

You can get your **VPS\_IP** from **Step 6** (Your VPS hosting will provide this information)

**\*\*Please note - the Masternode Config file should have only one line of text. All other lines should be commented out with # at the beginning of each line.\*\***

5.4: Paste masternode information[step5.3] into masternode.conf on new line.

5.5: Save and close *masternode.conf*

## Step 6:

Set up your server hosting (VPS)

If you have access to your own Linux Ubuntu Server running at least V16.04 with a static IP, DDOS protection and all behind a nicely configured firewall then feel free to skip this step.

Otherwise, if you understood nothing in the above-mentioned paragraph then I suggest you stop now before you launch the nukes by mistake.

If you do on the other hand have technical understanding but you do not have access to the hardware or the technical skills to manage the hardware, then VPS is for you (Virtual Private Server).

Hit the big VULTR button below and sign up for an account (DISCLAIMER: It will ask for a credit card and it will cost you fees to run this service every month). Set up a new Ubuntu Server and obtain your SSH credentials.



Open up an SSH client (Putty is a great option!) then, Connect to your VPS static IP and enter in the root credentials (you will find this in the server management portal). Ubuntu (16.04) VPS is recommended - You can use \$10 per month VPS with 1CPU/1G Memory/25GB SSD/1000GB Bandwidth.)

## Step 7:

Install and update some needed libraries & Install PUSHI wallet.

**7.1:** To install the libraries, please run each of the following lines **INDIVIDUALLY** (do not try to script them) and take care to make sure you run **ALL** commands.

```
sudo apt-get update
sudo apt-get upgrade
sudo apt-get install git
sudo apt-get install automake
sudo apt-get install build-essential
sudo apt-get install libtool
sudo apt-get install autotools-dev
sudo apt-get install autoconf
sudo apt-get install pkg-config
sudo apt-get install libssl-dev
sudo apt-get install libboost-all-dev
sudo apt-get install libevent-dev
sudo apt-get install nano
sudo apt-get install software-properties-common
sudo apt-add-repository ppa:bitcoin/bitcoin
sudo apt-get update
sudo apt-get install libdb4.8-dev
sudo apt-get install libdb4.8++-dev
sudo apt-get install libminiupnpc-dev
```

**7.2: Create Swap Space (Important - otherwise, you may fail to compile):**

```
fallocate -l 3G /swapfile  
chmod 600 /swapfile  
mkswap /swapfile  
swapon /swapfile  
echo -e "/swapfile none swap sw 0 0 \n" >> /etc/fstab
```

**If any of the above-mentioned commands fail, go back to Step 7 and reinstall ALL dependencies one by one.**

**7.3: Get the source code and compile it**  
(This process will take some time, please be patient):

```
git clone https://github.com/pushiplay/pushi.git  
cd pushi
```

```
./autogen.sh  
./configure  
make  
sudo make install  
cd /root/pushi/src/  
./pushid
```

**7.4: Create .PushiCore directory:**

```
cd /root/pushi/src/  
./pushid
```

**(Error will appear here, do not worry; If it stop here you can use CTRL + C to stop it.)**

## Step 8:

Edit pushi.conf file & Start the service.

### 8.1: Edit pushi.conf file:

```
nano /root/.pushicore/pushi.conf
```

### 8.2: Copy and paste the following into *pushi.conf*:

```
rpcuser=YOUR_USER_NAME  
rpcpassword=YOUR_PASSWORD  
rpcallowip=127.0.0.1  
listen=1  
server=1  
daemon=1  
maxconnections=64  
masternode=1  
logtimestamps=1  
masternodeprivkey=MN_GENKEY  
externalip=VPS_IP:9847
```

*Modify the above information:*

*Change **YOUR\_USER\_NAME** to a username*

*Change **YOUR\_PASSWORD** to a secure password (random is recommended)*

*Replace **VPS\_IP** with your VPS IP address*

*Replace **MN\_GENKEY** with your masternode key from [step3.2]*

### 8.3: Save and exit (CTRL + X).

### 8.4: Start the PUSHI server:

```
cd /root/pushi/src/  
./pushid
```

### 8.5: You can use the following command to get more information:

```
./pushi-cli getinfo
```



## Step 9:

### Installing the Sentinel Service

#### 9.1: Change directory to SRC

```
cd root/pushi/src
```

#### 9.2: Make sure Python version 2.7.x or above is installed:

```
python --version
```

#### 9.3: Update system packages and ensure virtualenv is installed:

```
sudo apt-get update  
sudo apt-get -y install python-virtualenv  
sudo apt-get -y install virtualenv
```

#### 9.4: Clone Sentinel Git and run sentinel install

```
git clone https://github.com/pushiplay/sentinel.git && cd sentinel  
virtualenv ./venv  
./venv/bin/pip install -r requirements.txt
```

#### 9.5: Set up crontab job for Watchdog Sentinel Service:

```
crontab -e
```

Select the “nano” option that appears after entering this command.

#### 9.6: In the *nano editor*, add the following line to the file and then press CTRL+X and then press “Y” to save the file.

```
***** cd /root/pushi/src/sentinel && ./venv/bin/python bin/sentinel.py >/dev/null 2>&1
```

#### 9.7: Test Sentinel Service

```
./venv/bin/py.test ./test
```

Please ignore errors in test for the time being, This will be updated.

## Step 10:

Start your masternode!

9.1: Restart local wallet and Open the Debug Console.

9.2: Enter the following to start your Masternode(**MASTERNODE\_ALIAS\_NAME** from step3.3):

```
masternode start-alias MASTERNODE_ALIAS_NAME
```

9.3: You should see something very similar to this:

```
"alias" : "MASTERNODE_ALIAS_NAME",  
"result" : "successful"
```

9.4: You can use the following commands on the VPS to see the status of Masternode:

```
./pushi-cli masternode status
```

9.5: Keep your VPS and PUSHI services running.

*If this tutorial has helped, please feel free to donate some Pushi ☺*

**PUSHI Beast**

PUSHI ADDRESS:

PEbRd2ALqBYJJHfB9Et9qXTmmB3uVWCn3P

