IoTE Masternode Erection Operation Instructions

www.iote.one

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Erection

Setting up an IoTE masternode requires a basic understanding of Linux and blockchain technology, as well as strict following of instructions. Masternode also needs regular maintenance and careful security deployment, especially when you do not store your IoTE coins in hardware wallet. In this process, some choices need to be made and optional additional steps taken to improve security.

Before you start

You may need:

- 150,000 IoTE tokens
- Store your IoTE wallet, which supports IoTE Core
- Own your own IP Linux server, preferably virtual private server (VPS)

Install IoTE Core in Linux

IoTE Core is the software behind the IoTE Core GUI and IoTE masternode. If the GUI is not displayed, it will run on your VPS as a daemon (ioted) controlled by a simple command interface (iote-cli).
Open the SSH console and connect with a new user name and password created by the non-root user.
Manually download and upload components of IoTE Core.

```
mn @iotetest:~# ls

iote-cli    ioted

mn@iotetest:~#
```

Executive command:

chmod 777 iote-cli

chmod 777 ioted

Give program execution authority

Execute ./ioted –daemon

```
mn @iotetest:~# ./ioted -daemon

IoTE Core server starting
```

Execute command review to ensure that blockchain is synchronized to the latest

```
./iote-cli mnsync status
```

Type the following two commands to generate the masternode private key and the new IoTE address of the collateral:

```
./iote-cli masternode genkey

936SuFLgu35TBMnviPSwSjAxXnKna3wxZWMTeZti5TSvux6Yjx3
```

```
./iote-cli getaccountaddress mn1

ES3sZx69gNkhqWoAy3p92DpSL6dQmU9U9w
```

Note down the masternode private key and attached address, as we will need it later.

Send margin

Operation masternode requires an IoTE address with a single transaction output (UTXO) of exactly 150000 IoTE. Once sent, various keys about the transaction must be extracted for later input in the configuration file and registration transaction as evidence to write the configuration to the blockchain to include masternode in the deterministic list. This guide will introduce the steps of IoTE Core.

Open the IoTE Core wallet and wait for it to synchronize with the network. When the IoTE Core wallet is ready, it should look like this:

Now, 150,000 IoTE are sent to the new address you generated in the previous step in a single transaction (ES3sZx69gNkhqWoAy3p92DpSL6dQmU9U9w). This can be sent from another wallet or from funds already deposited in the current wallet. After the transaction is completed, check the transaction in blockchain resource manager through the search address. You will need 15 confirmations before starting masternode.

You can enter the following command:

./iote-cli masternode outputs

Wait for the confirmation result. When the execution result is as follows, proceed to the next step.

```
mn @iotetest:~# ./iote-cli masternode outputs

{

  "f50ae5ac8639eb5cb1d90c6f92ec03d16bf1ec56437f41629f48a6bd079072ce": "0"

}
```

Execute

```
./iote-cli stop
```

Close ioted program

Configuration node file

Use the following command to open the configuration file:

nano ~/.iotedata/iote.conf

An editor window will appear (you can use editors other than nano such as vi, etc.). Now we need to specify several variables to create a configuration file. Copy and paste the following text to start creation, and then replace the specific variables in your configuration as follows:

```
rpcuser=yiimprpc

rpcpassword=iJVCfVkdCuyHDvSC3JUhg

masternode=1

masternodeprivkey=936SuFLgu35TBMnviPSwSjAxXnKna3wxZWMTeZti5TSvux6Yjx3

externalip=***.***.***.***
```

- rpcuser: Enter any number or letter string, no special characters are allowed.
- rpcpassword: Enter any number or letter string, no special characters are allowed.
- masternodeprivkey: This is the masternode private key that you generated in the previous step.
- externalip: This is the IP address of your VPS.
- masternode: This is your masternode switch, set to 1 to enable.
- masternodeprivkey: This is the private key that you set through the masternode genkey command.

Use the following command to open the configuration file:

nano ~/. iotedata /masternode.conf

Add a new line and fill in the following:

Name, IP:2112, private key, transaction ID (obtained by masternode outputs) identification location

```
mn1 ***.***.***.***:2112 936SuFLgu35TBMnviPSwSjAxXnKna3wxZWMTeZti5TSvux6Yjx3
f50ae5ac8639eb5cb1d90c6f92ec03d16bf1ec56437f41629f48a6bd079072ce 0
```

Save all files. You can now start running IoTE tokens on masternode to start synchronizing with blockchain:

```
./ioted -daemon
```

- You will see a message that shows IoTE Core server starting.

Install Sentinel

We will now install Sentinel, a software that runs as a watchdog to communicate with the network, thus indicating that your node is working normally:

- cd ~/.iotedata
- git clone https://github.com/IoTEChain/sentinel.git
- cd sentinel
- pip install -r requirements.txt
- python bin/sentinel.py
- You will see a message that says "ioted not synced with network! Awaiting full sync before running Sentinel". Add ioted and sentinel to crontab to ensure it runs every minute to check your masternode:
- crontab -e
- Select nano as your editor and enter the following line at the end of the file:
- */1 * * * * cd ~/.iotedata/sentinel && python bin/sentinel.py >/dev/null 2>&1

- **Press enter to make sure there is a blank line at the end of the file, then press Ctrl+X to close the editor, and press Y and Enter to save the file.**

Now, we need to wait for the confirmation of 15 margin transactions to end and for blockchain to complete synchronization on masternode.

Start IoTE masternode

When all operations are successfully and correctly executed, execute the following command now

```
./iote-cli masternode start-all
```

Start masternode

The state of masternode can be approved

```
./iote-cli masternode status

./iote-cli masternode list
```

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