

# SAROS MasterNode Guide

V1.1

## Pre-requisites

### Local

Windows wallet holding at least 1501 SAROS coins

### Remote VPS

Ubuntu 14.04 VPS (in this guide I am using a XS ordered from [www.MasterHash.us](http://www.MasterHash.us))

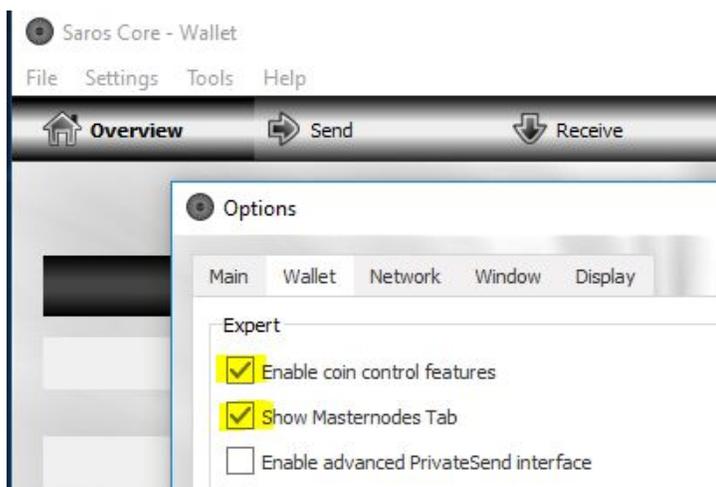
## OVERVIEW

This guide will show the full installation of a SAROS masternode using a local windows wallet, linked to a remote linux VPS which will act as the masternode.

It is not recommended to use your own home network for masternode hosting, as this exposes your IP address to the network.

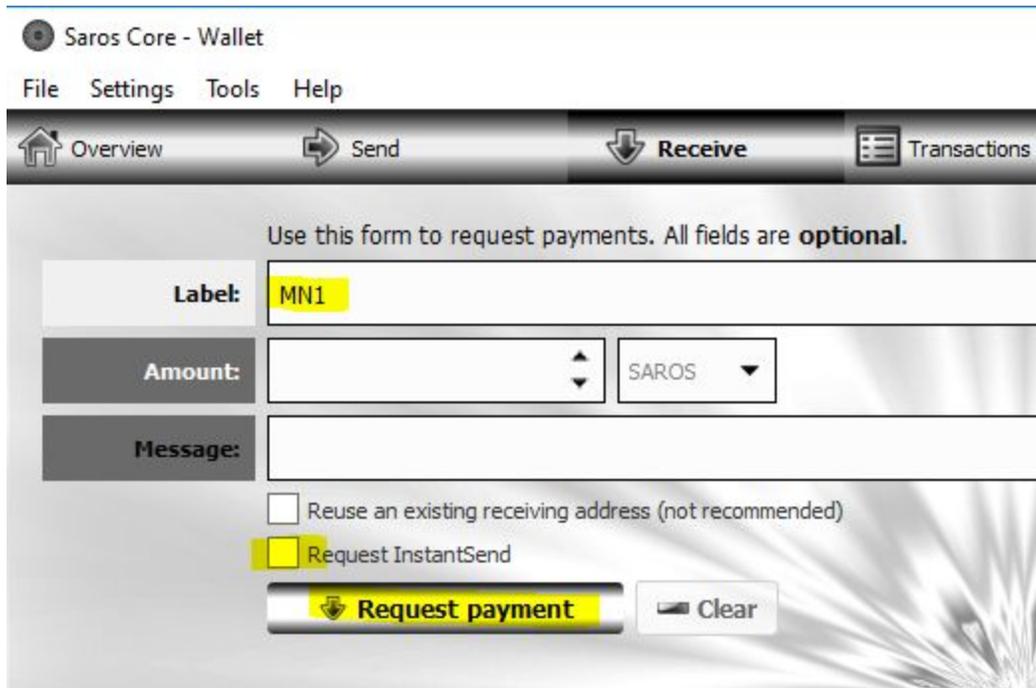
## Steps

1. From your local windows wallet click **Settings - Options**, then ensure both “Enable coin control feature” and “Show Masternodes tab” are checked



2. Restart the wallet when prompted

- From the **Receive** tab, enter a label of your choosing (in this guide we will use MN1). Ensure “Request InstantSend” is NOT checked, and click **Request Payment**



Saros Core - Wallet

File Settings Tools Help

Overview Send **Receive** Transactions

Use this form to request payments. All fields are **optional**.

**Label:** MN1

**Amount:** [ ] SAROS

**Message:** [ ]

Reuse an existing receiving address (not recommended)

Request InstantSend

**Request payment** Clear

- In the new window, save the newly created address to your clipboard memory
- Click **Send** tab, and paste the address in the “**Pay To**” textbox ensure your chosen label automatically appears in “label”
- Input exactly 1500 coins to your address, and ensure “Subtract fee from amount” is NOT selected



**Amount:** 1500.00000000 SAROS  Subtract fee from amount

- Click **Send**
- Click the **Transactions** tab, at this point we need to wait until there are at least 15 confirmations appearing for your transaction.
- From here, as we wait for the confirmations to appears we can move to the remote VPS.

## REMOTE VPS

- Using PUTTY, remotely connect to your Ubuntu 16.04 VPS
- Install the prerequisites for SAROS via the following console commands

```
sudo apt-get update
```

```
sudo apt-get install software-properties-common pwgen nano git unzip
```

```
sudo apt-get install build-essential libtool autotools-dev automake pkg-config libssl-dev libevent-dev  
bsdmainutils
```

```
sudo apt-get install libboost-system-dev libboost-filesystem-dev libboost-chrono-dev  
libboost-program-options-dev libboost-test-dev libboost-thread-dev
```

```
sudo add-apt-repository ppa:bitcoin/bitcoin  
sudo apt-get update  
sudo apt-get install libdb4.8-dev libdb4.8+-dev
```

3. Now we need to download and compile the wallet - this will take some time **(you need a VPS server with at least 1GB memory for this. If you're using Ubuntu 14.04 with less than 1 GB memory skip to step 4)**

```
git clone https://github.com/sarospay/saros && cd saros && ./autogen.sh && ./configure && make  
cd src  
strip sarosd  
strip saros-cli  
cp sarosd /usr/bin  
cp saros-cli /usr/bin
```

Proceed to step 5

4. If you're running Ubuntu 14.04 (with less than 1 GB memory), download the latest release of SAROS linux wallet: (please consult github for latest version)

```
wget https://github.com/sarospay/saros/releases/download/1.1.1/ubuntu14.04.zip
```

```
unzip ubuntu14.04.zip
```

```
cd ubuntu14.04
```

```
chmod +x saros-cli
```

```
chmod +x sarosd
```

```
cp sarosd /usr/bin
```

```
cp saros-cli /usr/bin
```

```
cd ~
```

5. Now we have the wallet software, we need to start it with the following command

```
sarosd -daemon
```

6. Use the saros-cli command to ensure blockchain is synchronized fully

```
saros-cli getinfo
```

7. Generate a masternodeprivkey (this is used to link the masternode to your local wallet)

```
saros-cli masternode genkey
```

8. Copy the output to notepad, for this guide, the masternode genkey is

```
Y56zydrLyZSMhTB8DbFmJTzozdPQ5aXz9mrwMqKvgdeR2CTKME
```

9. Once synchronized to current blockheight, stop the daemon

```
saros-cli stop
```

10. Copy the below into ubuntu command prompt, which will configure the VPS configuration file

```
USERNAME=$(pwgen -s 16 1)  
PASSWORD=$(pwgen -s 64 1)  
cat << EOF > ~/.saroscore/saros.conf  
rpcuser=$USERNAME  
rpcpassword=$PASSWORD  
rpcallowip=127.0.0.1  
server=1  
listen=1  
daemon=1  
maxconnections=24  
masternode=1  
masternodeprivkey=PASTE_MASTERNODE_PRIVKEY  
externalip=TYPE_VPS_IPADDRESS  
EOF
```

11. Start the daemon

```
sarosd -daemon
```

12. Use saros-cli to confirm masternode sync is complete

```
saros-cli mnsync status
```

13. Wait until **AssetID** is 999 (keep running the above command)

14. Confirm **AssetName** says "Masternode\_Sync\_Finished"

15. Now we need to edit crontab which will start SAROS if the vps is rebooted

```
crontab -e
```

(choose nano as editor if prompted)

16. At the bottom of the file, type the below

```
@reboot sarosd -daemon
```

17. Press **Control-X, Y, Enter**
18. The daemon installation is now complete

## SENTINEL

Sentinel is a software package that needs to be run and configured for SAROS, otherwise your masternode will revert to “WATCHDOG\_EXPIRED” after a short period

1. Go into the .saroscore directory

```
cd ~  
cd .saroscore
```

- 2.
3. Download the sentinel from the SAROS github

```
git clone https://github.com/sarospay/sentinel
```

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

```
python --version
```

5. Update, and install virtualenv

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

6. Goto Sentinel directory, and install python dependencies

```
cd sentinel  
mkdir database  
virtualenv ./venv  
./venv/bin/pip install -r requirements.txt
```

7. Use nano to configure the sentinel.conf file

```
nano sentinel.conf
```

8. Change the third line to this

```
saros_conf=/root/.saroscore/saros.conf
```

9. Press **Control-X, Y, and Enter**

10. Go back into crontab (crontab -e) and paste the below line at the bottom  
`**** cd /root/.saroscore/sentinel && ./venv/bin/python bin/sentinel.py >/dev/null 2>&1`
11. Press **Control-X, Y, and Enter**

## LOCAL WINDOWS WALLET

By now the local windows wallet will should be at 15 confirmations for your transactions, If it is not, you **MUST** wait for 15 confirmations before continuing

1. Click **Tools - Debug Console** and type **masternode outputs**, then press **enter**
2. You will see a outputted line, similar to the below

```
"002eae7f9568c5751b091fasdf58fe612834349c8573dde234330a28138be97" "0"
```

3. Remove the quotations and save in notepad, this is the collateral id

```
002eae7f9568c5751b091fasdf58fe612834349c8573dde234330a28138be97 0
```

4. Click **Tools - Open Masternode Configuration File**
5. In this textfile, you need to place a line of information containing the following:

```
LABEL SERVERIP:PORT MASTERNODEPRIVKEY COLLATERAL_ID
```

6. For our example, this will be:

```
MN1 123.123.123.123:8992 56zydrLyZSMhTB8DbFmJTZozdPQ5aXz9mrwMqKvgdeR2CTKME  
002eae7f9568c5751b091fasdf58fe612834349c8573dde234330a28138be97 0
```

The above is ONE LINE in notepad.

7. Save the masternode.conf file and restart the wallet
8. Once the wallet is loaded, and full synced, you will now see your masternode listed in **Masternodes - My Masternodes**
9. Right click your masternode and click **Start Alias**
10. Your Masternode will now say 'Pre-enabled' before switching to 'Enabled'. This can take upwards of 30 minutes