Noir
Easy setup guide

Your guide for an easy start with Noir
How to setup a wallet, miner and Noirnode

Content

Thank you for choosing Noir!

In this guide we will help you making it easy to setup all you need to start working with Noir.
If you have questions about how to use this guide, or during the process of setting up a wallet or node, please do not hesitate to contact us. You can reach us via our website www.Noirofficial.org or via our discord.

This guide is meant as an easy setup guide.
It is especially useful for the first time you set up a Noir wallet, miner or node.
For more detailed information or advanced features, please visit the documentation page on our website or
contact our community on our Discord.

Click on the page number to go directly to the section of your choice!

Disclaimer:
Noir is a community coin. All software, guides and any other means that is presented to you from the Noir team and/or community, you will be using at your own risk.

If this guide is useful to you, please donate to keep the community alive:
Noir address: ZL2juii5Y6z9Fnsd9Y1dRRvFC33CR9aDj8
BTC address: 16Zyogw35Zwg4CGYvjTg8UiedZxKkN1W3x

Author:	@Oscar#8795
Date:	10-10-2018

Using Noir with customers, organisations and individuals, as a sender or receiver.

Thank you for choosing Noir.

Noir is an exclusive, high-end privacy crypto currency with a limited supply.
Noir is for individuals, companies or organisations who need to make secure, valuable and/or private transactions, made in an environment where sender and receiver are connected and protected.
Noir facilitates transactions between two entities, without any third party in between them.

In this section we would like to help you and the person/organization that you want to do a transaction with. We let you know what to do to make a safe first transaction.

To make it very easy for both sender and receiver doing their first Noir transaction, just follow these steps:

1. Of course, you are already familiar with Noir.
   You have probably already downloaded a wallet, or if not, do so now (see section 2, 3 or 5 for the wallet of your choice). Make sure to store your password in a safe place, make a backup and print a paper wallet!

2. Ask the sender or receiver of your Noir if he or she already has a Noir wallet.
   If not, please send him/her this instruction (if you like, attach this setup guide in your message):

   Good day,

   Hereby I send you all you need to make our Noir transaction possible:
   - Download the Noir easy setup guide from the Noir website.
   - Here is the link to download a wallet of your choice.
   - Do not forget to store your password in a safe place, make a backup and print a paper wallet!

   Have a nice day!

3. Now the sender of the Noir amount, needs the receivers address.
   So make sure the receiver sends his wallet address to the sender (email, or any other means).

4. Store the receivers address in your wallet (go to file/sending addresses) and give it the correct name (for example the name of the person or organisation, so you can find and use it again in future).

5. Now we advise you to, as a test, make sure the right wallet address is being used.
   Therefore, send a very small amount of Noir to the receivers Noir wallet address.
   To follow the progress of the transaction, have a look in the Noir block explorer: click here.
   Copy paste the transaction ID in it and it will show the block with your transaction in it.

   Note: If you do not use the correct address you will lose your money!

6. Let the receiver confirm to you that she or he has received the amount.
   If so, make the transaction you both agreed on.

N.B.: Of course, it also possible to hold Noir as an investment, but that is not discussed in this section.

1. Easy setup local Noir Windows wallet

Install and run the Noir-Qt wallet on your Windows machine.

1.1 STEP 1/5 Download the wallet

Download the latest Windows wallet from Github or our website.

1.2 STEP 2/5 Start installation

Double click on Noir-qt.exe.
NOTE; Click "Yes" button if you get 'unknown publisher'.

1.3 STEP 3/5 If you first time run the wallet, a pop-up screen will prompt for Data Directory.

By default, it will store in the %AppData%/Noir directory. It is recommended to
enter C:\WalletData\noir directory, as it will be easier for you to find the wallet config and data files.
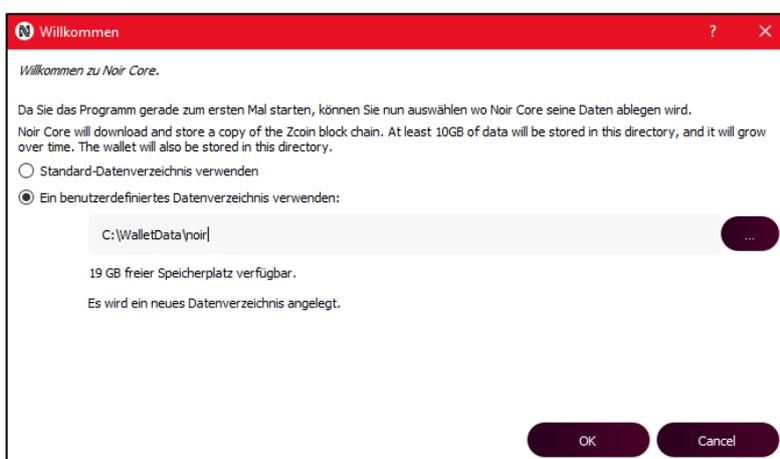
1.4 STEP 4/5 Let the wallet sync until you see the tick symbol on the right bottom
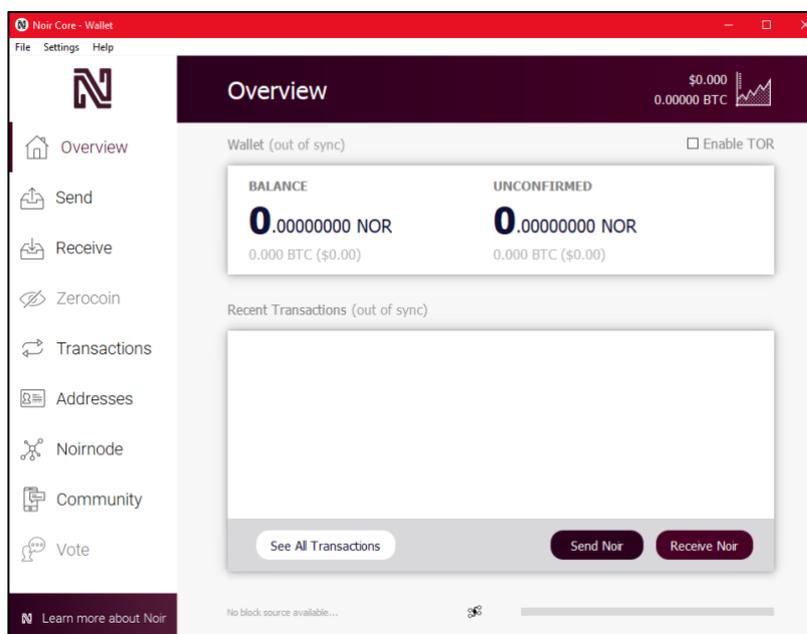
NOTE: for a quicker synchronization, you can also download the Noir blockchain from a repository. See section 6.2 on how to do this.

1.5 STEP 5/5 Secure your Noir Core Wallet

After Installing and syncing the wallet, make sure you secure your wallet by these three actions:
1. Encrypt your wallet with a password. Click: **Settings**–>**Encrypt Wallet**
2. Backup your wallet on an offline device. Click: **File**–>**Backup Wallet**
3. Print a paper wallet. Click on **Receive** tab–>**Show Paper Wallet**

IMPORTANT NOTICE
NEVER EVER give your password to someone else!
When you lose your password, you can not get access to your funds!
The Noir team will never ask for your passwords!

2. Easy setup local Noir MAC wallet

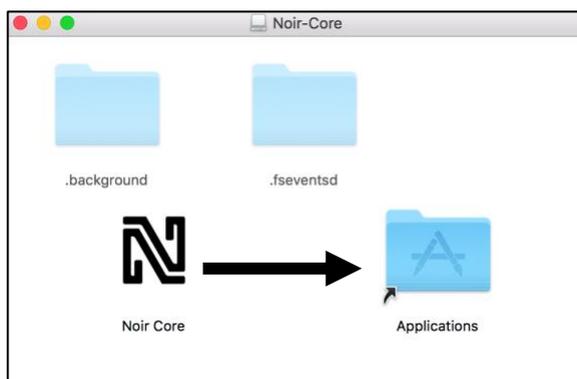**Install and run the Noir-Qt wallet on your MAC.**

2.1 STEP 1/5 Download the wallet

Download the latest MAC wallet from Github or our website.

2.2 STEP 2/5 Start installation

Go to 'Downloads' on your Mac and double click on noir-qt.dmg.

After that, drag the Noir logo to the application folder.

### 2.3 STEP 3/5 If you first time run the wallet, a pop-up screen will prompt for Data Directory.

By default, it will store in the "/Users/your_username/Library/Application Support/Noir" directory. It is recommended to use the custom data directory, as it will be easier for you to find the wallet config and data files.
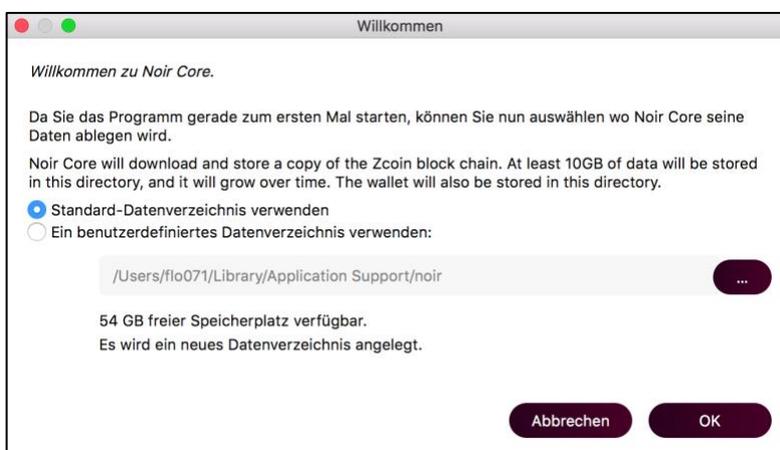
2.4 STEP 4/5 Open the wallet from program files and let the wallet sync until you see the tick symbol on the right bottom

If your wallet cannot get connection with the network, you can add addnodes or peers in the wallet.conf file. See section 6.1 on how to do this.
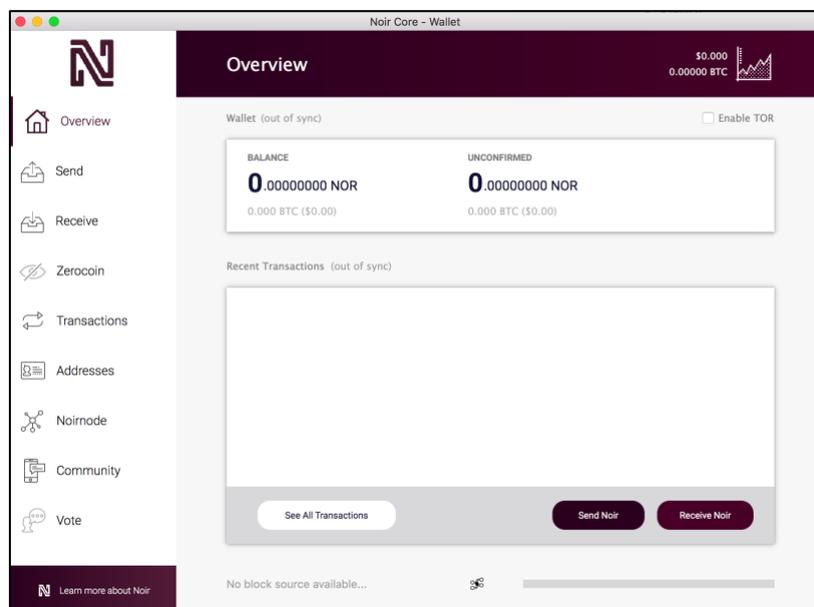
NOTE: for a quicker synchronization, you can also download the Noir blockchain from a repository. See section 6.2 on how to do this.

2.5 STEP 5/5 Secure your Noir Core Wallet

After Installing and syncing the wallet, make sure you secure your wallet by these three actions:
4. Encrypt your wallet with a password. Click: **Settings**–>**Encrypt Wallet**
5. Backup your wallet on an offline device. Click: **File**–>**Backup Wallet**
6. Print a paper wallet. Click on **Receive** tab–>**Show Paper Wallet**

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</div>

3. Easy setup local Noir Linux wallet

NOTE: This installation is meant for Ubuntu versions 17.04 to 18.04 .
NOTE: The version in the screenshots below may be older but the method to install is the same.
NOTE: make sure you copy and paste the command lines one by one.

3.1 STEP 1/7 Download the latest Noir Core wallet version for Ubuntu.

Download the latest version of the wallet from our website or download it from our Gitub.

3.2 STEP 2/7 Extract the File Noir Core, rename to "Noir" and change permissions:

Issue the following command:

```
Chmod 711 noir
```

3.3 STEP 3/7 Show and install library dependencies

Open Linux Terminal and issue commands (make sure to copy them one by one):

```
ldd noir
sudo apt-get update
sudo apt-get upgrade

sudo apt-get install Build-Essential Libtool Autotools-Dev Automake Pkg-Config
libssl-Dev Libevent-Dev Bsdmainutils Libboost-All-Dev

sudo apt-get install Libqt5gui5 Libqt5core5a Libqt5dbus5 Qttools5-Dev Qttools5-Dev-
Tools Libprotobuf-Dev Protobuf-Compiler Libqrencode-Dev
```

3.4 STEP 4/7 Install Oracle Berkeley DB 4.8.30.NC

Now, download Berkeley DB 4.8.30.NC.Tar.Gz: click here.

Then, open Linux Terminal and Issue Commands:

```
Tar -Xzvf Db-4.8.30.NC.Tar.Gz
Cd Db-4.8.30.NC/Build_unix/
../Dist/Configure -Enable-Cxx
sudo Make
```

After that, tell Your System Where to Find Db4.8:

```
export BDB_INCLUDE_PATH="/Usr/Local/BerkeleyDB.4.8/Include"
export BDB_LIB_PATH="/Usr/Local/BerkeleyDB.4.8/Lib"
sudo Ln -S /Usr/Local/BerkeleyDB.4.8/Lib/Libdb_cxx-4.8.So /Usr/Lib/Libdb_cxx-4.8.So
```
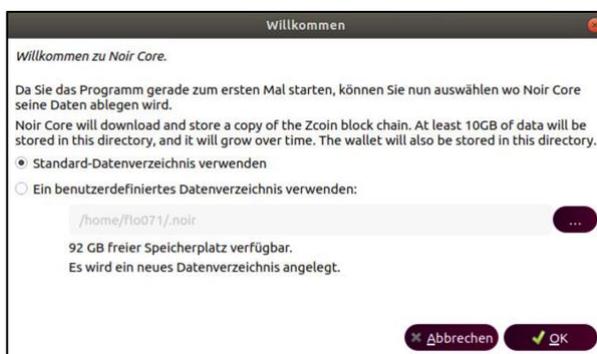
3.5 STEP 5/7 Open the Noir Wallet Program

In Terminal issue command:

```
./noir-qt
```

Then, Choose Where Noir Core Will Store Its Data:

3.6 STEP 6/7 Open and sync your wallet

After Installing and running the Wallet for the first time, wait for the Blockchain to fully sync.
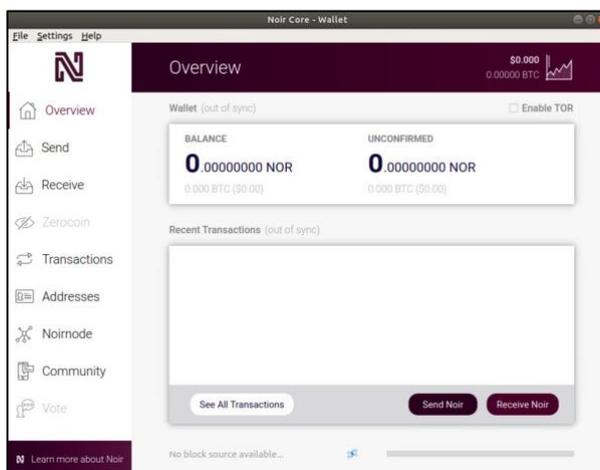
3.7 STEP 7/7 Secure your Noir Core Wallet

After Installing and syncing the wallet, make sure you secure your wallet by these three actions:
1. Encrypt your wallet with a password. Click: **Settings**–>**Encrypt Wallet**
2. Backup your wallet on an offline device. Click: **File**–>**Backup Wallet**
3. Print a paper wallet. Click on **Receive** tab–>**Show Paper Wallet**

<div align="center">

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</div>

4. Easy setup Noir WEB wallet

Web

Available for
desktop, tablet
and mobile.

Open Web
Wallet

Web TOR
Wallet

Why use a web wallet? For those wanting all of the Zerocoin privacy features of Noir without having to download the entire blockchain unlike the desktop core wallets.

Create a Noir web wallet

First, visit the web wallet page via our wallet download page and click on the web wallet of your choice.

1. Click on the 'Create an Account' button on the bottom of the page.
2. Now you are on the registration page and you will need to fill out the boxes.
3. Now you will need to add 2FA (two-factor authentication); this is a security requirement and is done through the Google Authenticator app. Scan your QR code with your phone using the app (explained in step below).
4. Follow the illustrated steps for the Google Authenticator app to add the Noir web wallet 2FA.
5. Now you can enter the code you received in the app to sign in to your account. You will now be on the overview page, showing your balances.

BASIC Functions:
1. To change the currency (USD or EURO), go to **YourUsername**–>**Settings**
2. To get your wallet's address, go to the **receive** tab.
3. To view transactions, go to the **transactions** page.

Using ZEROCOIN protocol:
1. To mint your Noir, first go to the overview page and choose Mint.
2. You may now choose an amount you want to mint from the drop-down menu and click Mint Zerocoin.
3. Once you have minted your Noir you are ready to spend. Click Spent on the overview page and select the amount you want to spend. This process takes 6 confirmations on the network before your funds are spendable in your main balance. Now you are free to send your Noir anywhere you like anonymously.

Do you **prefer to use TOR**? See section 6.3 for installing the extra requirements.

5. Advanced setup features for your local wallet

5.1 Connections: adding addnodes

To be sure to get connection with the Noir network, you can put extra nodes in the folder Noir.conf file. You can find these folders in %AppData%/Noir for Windows or %Application Support%\Noir\ for Mac.

Just copy these addnodes and paste them in the Noir.conf file:
addnode=106.72.145.64
addnode=113.161.230.70
addnode=117.181.56.196
addnode=140.82.16.151
addnode=194.118.31.182
addnode=199.247.28.146
addnode=209.250.238.242
addnode=37.17.168.174
 Or you can go to our official explorer and copy-paste nodes from there (make sure you put 'addnode=' before the IP addresses that you put in your noir.conf file.

5.2 Using a single address for change: creating a Custom Change Address

You may have noticed that when you send Noir to another wallet, the transaction details and blockchain explorer return change to your wallet using a different address. The reason for this is the input and output approach to transactions in a blockchain.
When you send a transaction, it references the block in which you received those funds. For example, let's say you have two transactions. A deposit to your wallet of 10 Noir and a withdraw of 2 Noir. When you send the 2 Noir, the deposit (input) of 10 Noir will be used, giving 8 Noir back in change. If you do not specify the change address, a random address is generated in the wallet.

With Noir, you can configure what address you would like change to go to. For example, perhaps you want to use a single address in your wallet and you want all change to be deposited back to that single address. On our website there is a guide that will demonstrate how to do so.

To go to the instructions, click here.

5.3 Extra privacy and security: using the TOR web wallet

Noir offers a TOR Web Wallet. TOR adds extra layers of privacy and security through the Tor network. Additionally, the web Tor wallet uses a USER/PASS + 2FA instead of an email login.

1. If you want to use the Tor web wallet, you must download a Tor web browser onto your device of choice. You can download the original Tor Browser from https://www.torproject.org/ which has versions for Windows, Mac and Linux.
2. If you want to access the Tor web wallet via your mobile device, you can download the Tor Browser for Android or iOS. There are several options for Android, such as Orbot + Orfox or Fire.onion; you can use any preferred Tor Browser of your choice as well.
3. After installing and running your Tor Browser, visit the Tor web wallet on our site via this link.
4. Now you can follow the instructions in section 5: easy setup Noir Web Wallet.

5.4 Quicker sync: syncing your wallet by using a bootstrap

Noir offers the possibility for a quicker sync procedure during the wallet setup.
To do this, you need a so called 'bootstrap', which you can find on our Github releases page.

These are the steps:

1. Download and install the wallet of your choice.
2. Encrypt and back up your wallet.
3. If everything is installed and works correctly, then close your wallet (this stops the syncing procedure).
4. Download the zip-file from our Github page. It is named Blockchain#.zip and has approx. 300 mb.
5. Unzip the file.
6. Place all folders of the unzipped file in the directory of your wallet. Locations are:
   - Windows: "%AppData%/Noir "
   - Mac: "/Users/your_username/Library/Application Support/Noir"
   - Linux: /home/flo071/.noir

   In fact, you have to replace the folders (because they are already installed)

7. If you have problems with replacing: you can also delete the files/folders in the noir-folder: blocks, chainstate, peers.dat and banlist.dat. Never delete wallet.dat!

8. If all folders have been replaced, start your wallet (simply by launching the application).
9. Now, you should see your wallet sync. It will give a notice like 'syncing from local folder'.

10. NOTICE: while the wallet is syncing from the bootstrap folder, you have time to check your connections. The bootstrap covers most of the noir blockchain files, but of course it misses the last couple of blocks. Therefore, after the bootstrap syncing procedure, the wallet automatically switches to the Noir-blockchain to sync the blocks that are not on the bootstrap files.

   Thanks for using Noir!

6. Easy setup Noir miner on Linux

The purpose of this guide is to get you started with mining Noir on Linux.
The Noir miner gives you rewards, because you help the Noir network with confirming transactions. When the rewards come available in your wallet, you can spend them or keep them in your wallet. The more coins you hold, the more rewards you will get as a miner.

NOTE: this is the easy setup guide for a Noir miner. For more detailed information, please visit our website.

This guide is intended for Ubuntu 16.04, but similar steps should work with other Debian distributions.

Please let us know if you experience issues following this guide. A helpful community is always available to assist on Discord. Alternatively, feel free to contribute to it! Noir is a community coin and we are always welcoming contributions that help Noir grow.

6.1 Update the apt package manager to obtain the latest packages

```
sudo apt-get update

sudo apt-get install automake autoconf pkg-config libcurl4-openssl-dev libjansson-dev
\libssl-dev libgmp-dev autotools-dev automake make \libcurl4-openssl-dev g++ libssl-
dev libgmp3-dev build-essential \screen automake m4 openssl libssl-dev git libjson0
libjson0-dev \libcurl4-openssl-dev autoconf python-software-properties -y
```

6.2 Install the necessary miner dependences

Once the dependencies are installed, clone cpuminer from the Github repository and run the build script.

```
cd ~
git clone https://github.com/JayDDee/cpuminer-opt
cd cpuminer-opt
./build.sh
```

6.3 Running the miner

If you haven't already registered for a mining pool, do so now. The example below uses the Noir Official Pool, but other pools can be found towards the bottom of the Noir Website.

Enter the following command, ensuring to update the following fields in <brackets>:
<username>: Your username you used to register with on the pool.
<worker name>: The name of a worker you registered on the pool. See your pool's Getting Started guide for assistance with this.
<password>: The password you assigned to your worker. This is not the login password for your pool account.
<threads>: The -tflag and threads is optional. This indicates the number of threads to mine with. Depending on your hardware specifications, tweaking this number can help improve performance. If this is left off, the default will use the number of cores for your processor.

```
./cpuminer -a lyra2z330 -o stratum+tcp://noir.pools.netabuse.net:3000 -u
<username>.<worker name> -p <password> -t <threads>
```

To view the mining pools we support, please visit our Discord.

Additional: if you want to run the miner from startup, please visit the documentationsection of our website.

7. Easy setup Noir NODE on Linux VPS

A Noir node will give you rewards for holding Noir. The rewards are paid, because of your help for creating blocks and keeping the Noir network strong and secure.
Note: if you have setup a node and you do not want to spend your rewards, you can setup a miner, to get rewards on the coins that you do have in your wallet (see section 7 how to do this).

This setup procedure helps you setting up a node step-by-step. Also, some of our community members make scripts, to have an even easier install. We post these scripts in our Discord (mostly as a pinned message). Always check if the scripts you use from others fits your situation/hardware and have correct version numbers. If you want to be sure to use the latest and correct versions, check our Github!

7.1 Things you need to get started

- Noir Core Wallet v1.0.0.2 or later: See Github for the latest release and release notes.
- 25,000 Noir coins in your wallet.
- A Virtual Private Server (VPS): A VPS is recommend as a Noir node requires dedicated resources and 24x7 availability for proper operation.
  The VPS must have at least 1 GB of RAM, 20 GB of storage space and a static public IP address. You can find an example of setting up a VPS server in section 9.
- Secure your Wallet. This is highly recommended. See Wallet / Securing the Noir Wallet for details.

7.2 STEP 1/4 Generating a Noir node Key

This section describes how to generate a Noir node key from a desktop wallet. You need a node key to match the Noir node on your VPS with your Noir wallet address.

First, launch your desktop wallet and navigate to **Help --> Debug Window --> Console** as shown in the screenshot below:
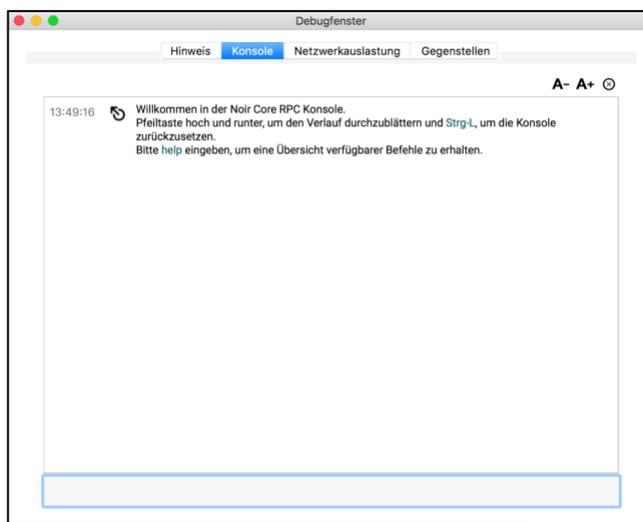
In the console, enter the following command. This generates the Noir node key. Be sure to save it to a safe location.

```
noirnode genkey
```

Next, enter the following command to generate a Noir node deposit address for the 25,000 Noir collateral. NN1 will be the label assigned to the new deposit address and can be changed if desired.

```
getaccountaddress NN1
```

After generating the Noir node key and Noir node wallet address, transfer the collateral deposit of 25,000 Noir. Be aware that you must send **exactly 25,000 Noir in a single transaction**. Also consider that a transaction fee will be deducted.
Once you have sent the 25,000 Noir to the address generated from the generated 'getaccountaddress', you will need to obtain the transaction ID and index.

Do this by navigating to **Help --> Debug Window --> Console** as shown in the screenshot above.
Type the following into the Console to obtain your **Transaction ID** and **Index**:

```
noirnode outputs
```

You should see the something similar to the example below:
{ "d8ff88888bb6d9998d22c5155437f009c72dfd55dd2222f87fd55e22c0f89ddc" : "1", }

From the example, we get the **Transaction ID** and **Index**:
- **Transaction ID:** d8ff88888bb6d9998d22c5155437f009c72dfd55dd2222f87fd55e22c0f89ddc
- **Index:** 1

Next, you will need to create a text file on the computer with the desktop wallet. Depending on your operating system, create a file called Noirnode.conf and place it in the appropriate directory:
- **Windows:** %APPDATA%
- **OS X:** ~/Library/Application Support/Noir
- **Linux:** $HOME/.Noir

In the file, add a line that matches the following syntax: LABEL IP:8255 Noir NODEKEY TXID INDEX
If you are running multiple Noir nodes, you will add one line for each node with the appropriate values:

Where:
- **LABEL:** The label of the node used for getaccountaddress command above.
- **IP:** Your VPS public IP address.
- **Noir NODEKEY:** Noir node key previously generated with the noirnode genkey command.
- **TXID:** The Transaction ID obtained using the noirnode outputs command above.
- **INDEX:** The Index obtained using the noirnode outputs command above.

Your file should look like this, except the first line which is there for visual reference. The file will only have one line.
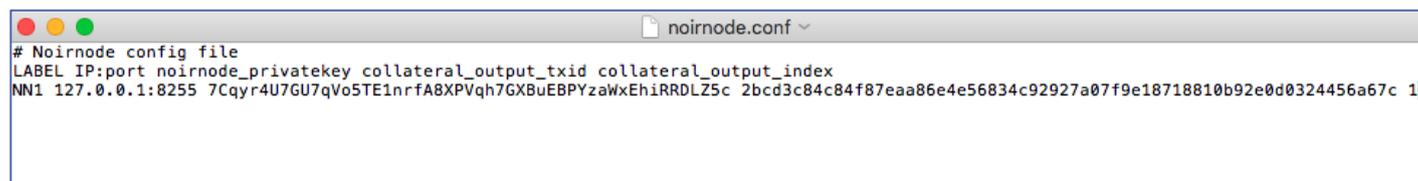
```
# Noirnode config file
LABEL IP:port noirnode_privatekey collateral_output_txid collateral_output_index
NN1 127.0.0.1:8255 7Cqyr4U7GU7qVo5TE1nrfA8XPVqh7GXBuEBPYzaWxEhiRRDLZ5c 2bcd3c84c84f87eaa86e4e56834c92927a07f9e18718810b92e0d0324456a67c 1
```

Save the file and restart your wallet.
The wallet is now configured for Noir node and next we will setup and link the Noir node server.

For the next steps, we'll be using Ubuntu Server 16.04 64-bit.
You must use **SSH** to connect to your VPS. You can use **PuTTY** for **Windows** or **Terminal** on **Mac OS X** (ssh root@IP).

So, let's login to our VPS with root user and create an extra user that we will later add to **sudoers** group.
Login as **root** and create a new user: adduser username

7.3 STEP 2/4 Server Configuration: installing the necessary packages

The following packages are mandatory to successfully setup a Noir node:

```
sudo apt-get update
sudo apt-get upgrade
sudo apt-get install build-essential libtool autotools-dev automake pkg-config
sudo apt-get install libssl-dev libevent-dev bsdmainutils libboost-all-dev
sudo apt-get install software-properties-common
sudo apt-get install dirmngr --install-recommends
sudo add-apt-repository ppa:bitcoin/bitcoin
sudo apt-get update
sudo apt-get install libdb4.8-dev libdb4.8++-dev
sudo apt-get install libminiupnpc-dev libzmq3-dev
sudo apt-get install libqt5gui5 libqt5core5a libqt5dbus5
sudo apt-get install qttools5-dev qttools5-dev-tools libprotobuf-dev protobuf-
compiler libqrencode-dev
```

Next, we will install and configure UFW, a firewall for Linux:

```
sudo apt-get install ufw
ufw allow ssh/tcp
ufw limit ssh/tcp
ufw allow 8255/tcp
ufw logging on
ufw enable
```

Additional: it is also recommended that you further harden your server with AppArmor or SELinux, Fail2Ban, and other common best practices as suggested here.

7.4 STEP 3/4 Download, Build & Configure the Noir node

First, download the latest version of the Noir wallet into your home directory, extract, and rename for clarity:

```
cd ~
wget https://github.com/noirofficial/noir/archive/v1.0.0.2.tar.gz
tar -xzvf v1.0.0.2.tar.gz
```

Next, we will build the wallet. These steps will take some time to complete, so please be patient:

```
cd noir-1.0.0.2
./autogen.sh
./configure --without-gui --enable-wallet
make
```

Once the installation is complete, we need to set up the Noir configuration files:

```
mkdir ~/.noir
nano ~/.noir/noir.conf
```

Next, enter the following configuration. Be sure to update the following fields in <brackets>:

- **<username>**: For example, Noiruser
- **<password>:** Any secure password, although the rpcallow=127.0.0.1 configuration prevents access outside the server itself.
- **<Noirnode-ip-address>:** The public IP address assigned to your server. Refer to your VPS provider documentation for details on how to assign and obtain your public IP address.
- **<Noirnode-key>:** The key of the wallet address that will be associated with your Noirnode as documented above.

```
rpcuser=<username>
rpcpassword=<password>
rpcallowip=127.0.0.1
port=8255
rpcport=8822
listen=1
server=1
daemon=1
logtimestamps=1
maxconnections=64
txindex=1
nnode=1
externalip=<noirnode-ip-address>:8255
nnodeprivkey=<noirnode-key>
```

Press **Ctrl+X** to save and **y** to confirm.
Next, start **noird daemon** and let it sync:

```
cd src
./noird
```

You can check the status of syncing by typing:

```
./noir-cli getinfo
```

Check the current block and compare it with the latest block of your synced core wallet, mining pool or Noir blockchain explorer.

7.5 STEP 4/4 Activate your Noir node

Finally, when it is fully synced, you can start your node from the desktop wallet.
First, double check that your Noir node addresses confirmed their 25,000 NOI balance and that you restarted the Noir wallet after creating the noirnode.conf file.

Next, in the wallet, go to the **Masternodes** tab and you should see a list of all Noir nodes on the network.
Click **My Noir nodes** in the bottom right to see the list of your Noir nodes that you added to noirnode.conf.

+

Click the **Start missing** button to start all of your nodes.

Your nodes should show **PRE_ENABLED** in status and after a few minutes change to **ENABLED**.

If the status changes to **EXPIRED**, there is something wrong in your configuration and you will need to go back and double check every step you've made.

8. Additional: subscription with a VPS provider & setup Linux VPS server

To install a Noir node, you can subscribe with a VPS provider like Vultr (stable and cheap host), or other similar providers with who offer VS services with the following requirements;

- Linux VPS (Ubuntu 16.04 64 bit)
- Static IP Address (dedicated Public IP)
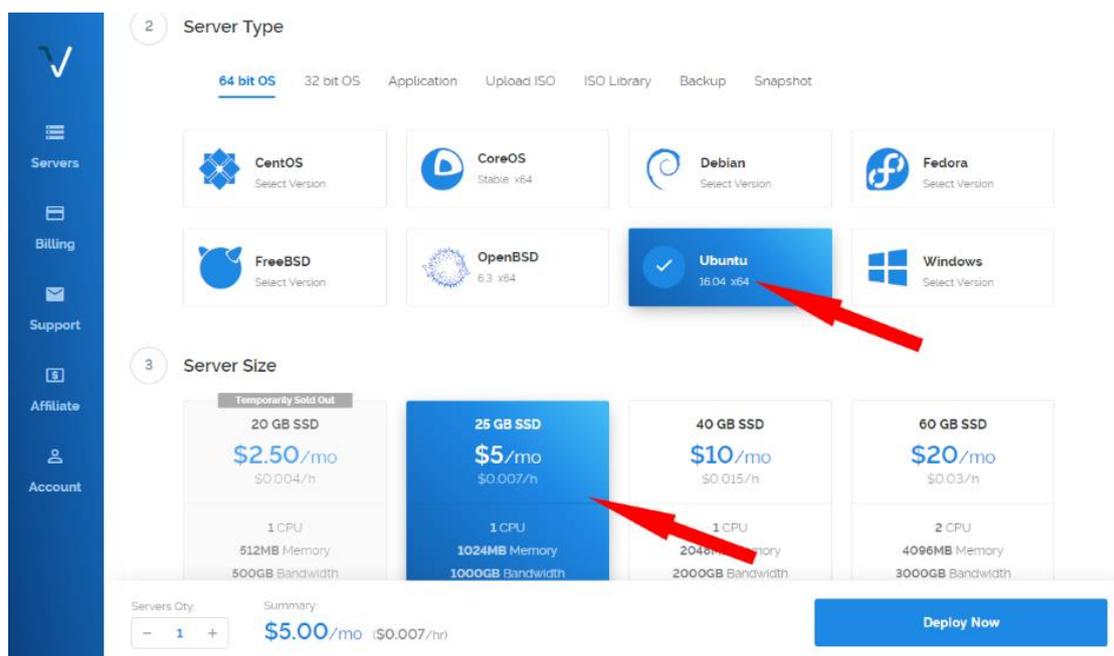- At least 1GB of RAM

8.1 STEP 1/4

Register an account Vultr, then click on "+" button from the dashboard
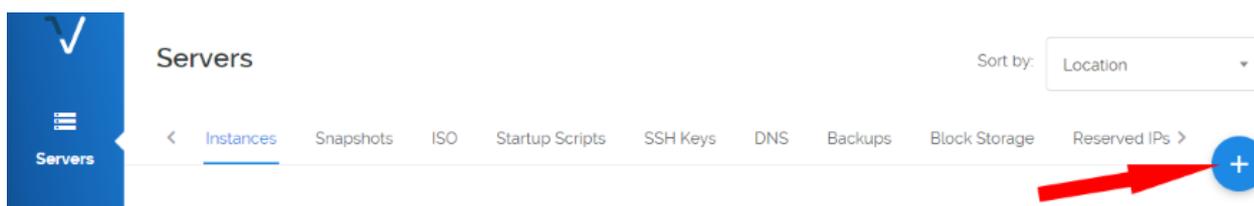
8.2 STEP 2/4

Select any 'Server Location' follow by Ubuntu 16.04 x64 for 'Server Type' and $5/month with 25 GB SSD for 'Server Size'. Leave 'Additional Features' options uncheck.

8.3 STEP 3/4

Enter a Hostname and Label for your VPS (for example, Noir_MN)

8.4 STEP 4/4

After successfully install of the VPS, click on the server from the list to jot down IP Address and root's Password. Keep these on a safe place! Preferably on a device that is not connected with internet.