Navigating on Metamask

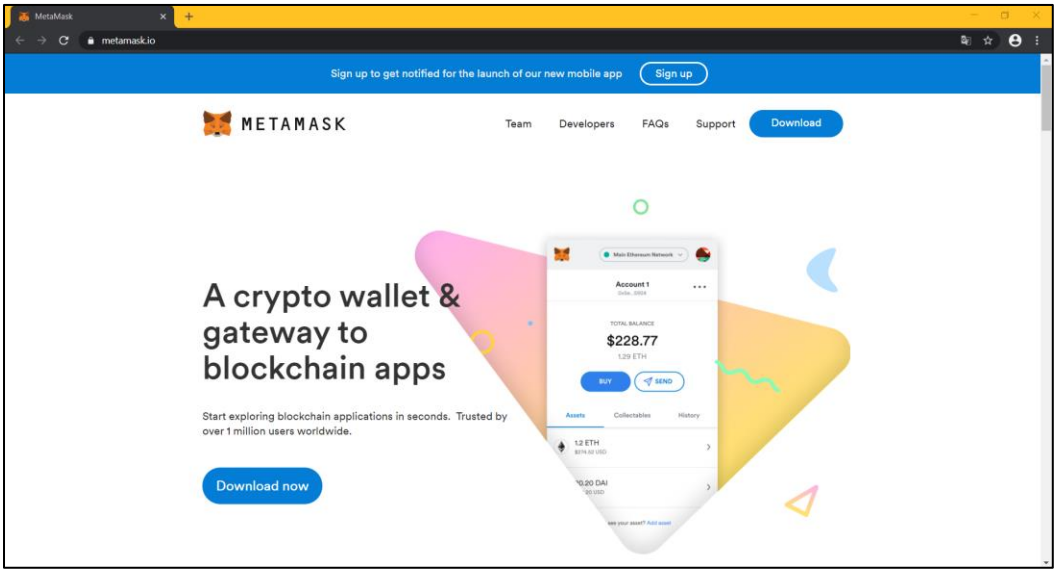
INITIAL NOTE

The digital environment is a very dynamic and agile environment where updates and changes occur on a constant basis. In this program, we will use web resources and external software in order to carry out the practical activities and provide a real vision of the tools available in the market.

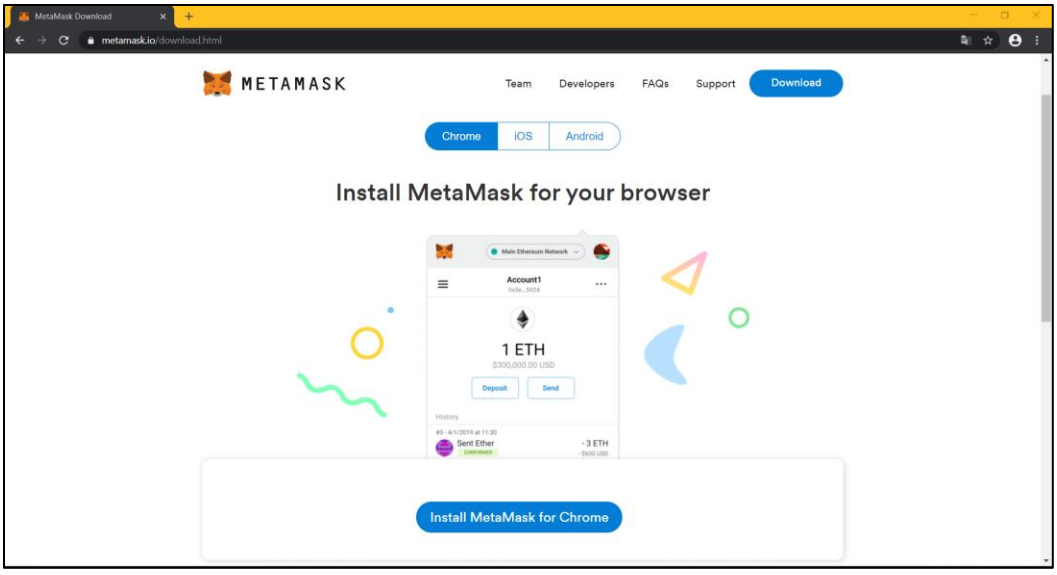
This means that, although we strive to keep the guides updated, sometimes some of the environments we will be showing you in the activities may suffer some small differences from the images reflected in these guides. Normally it is possible to follow the development of the activity by easily interpreting the differences between the guide and the real environment, if any. In case this is not possible, please let your facilitator know by sending a message through the program´s platform inbox.

1. *Download the MetaMask plug-in on your Chrome web browser.*

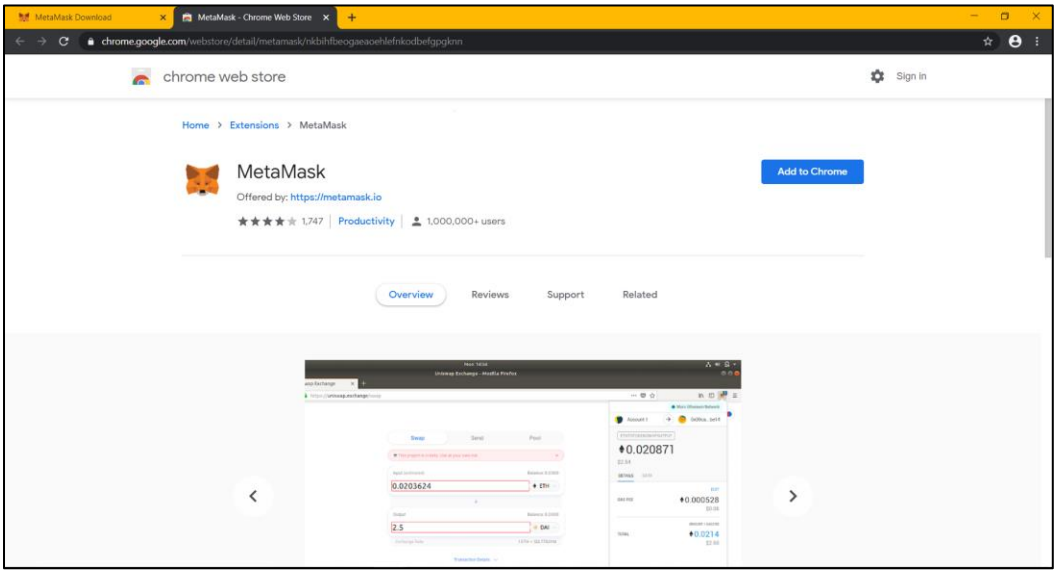
Go to https://metamask.io from your browser. We recommend the use of Google Chrome for this course, especially when using these tools. Once you have accessed the website, click on the "Download Now" button.



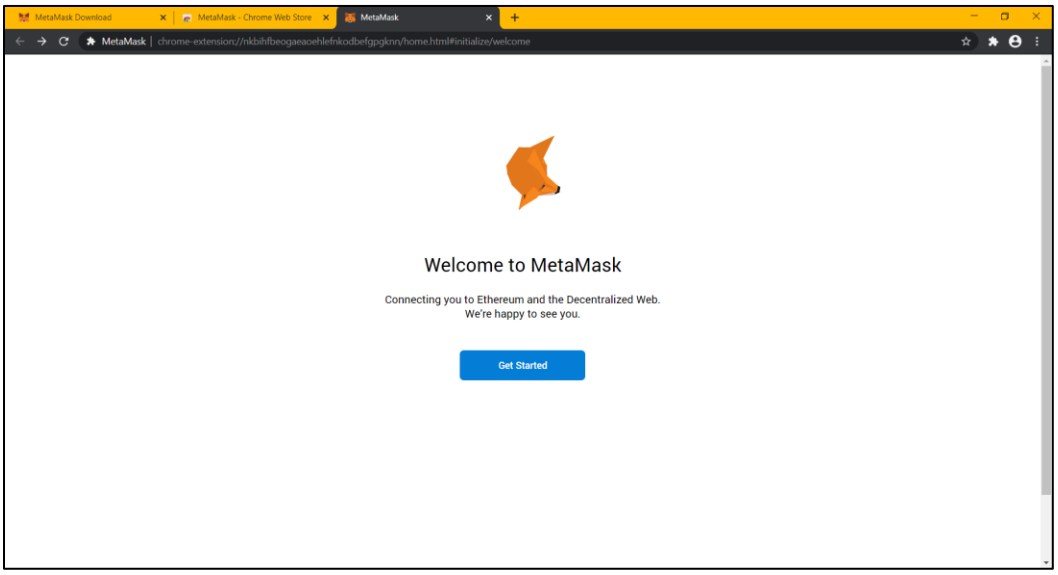
Now, in the "Chrome" tab, select "Install MetaMask for Chrome."


MetaMask Download
metamask.io/download.html
METAMASK
Team
Developers
FAQs
Support
Download
Chrome
iOS
Android
Install MetaMask for your browser
Account1
1 ETH
$300,000.00 USD
Deposit
Send
History
Sent Ether
- 3 ETH
Install MetaMask for Chrome

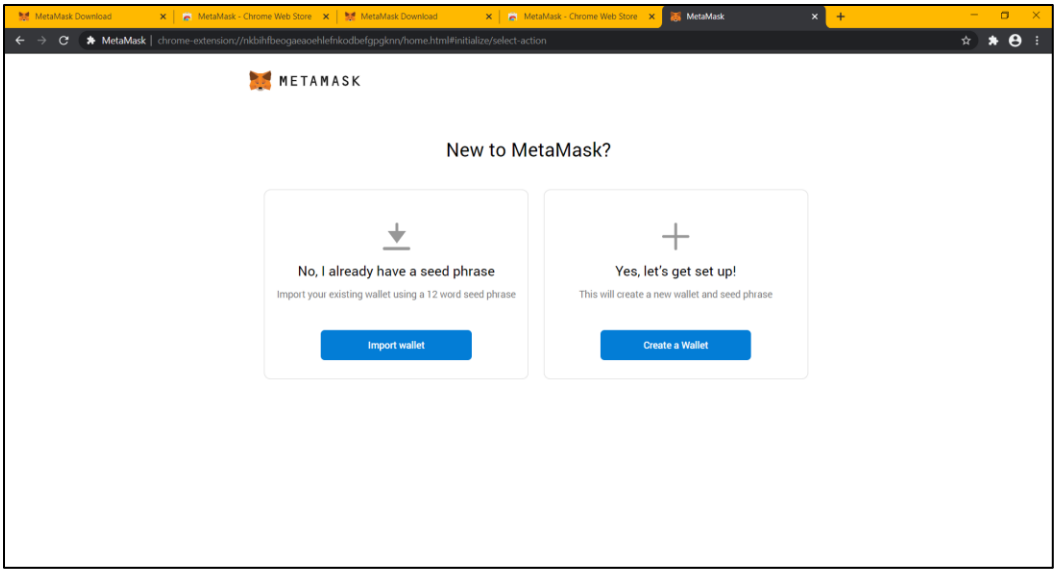
This will take you to the Google Chrome extensions page. Select “Add to Chrome” in this step.



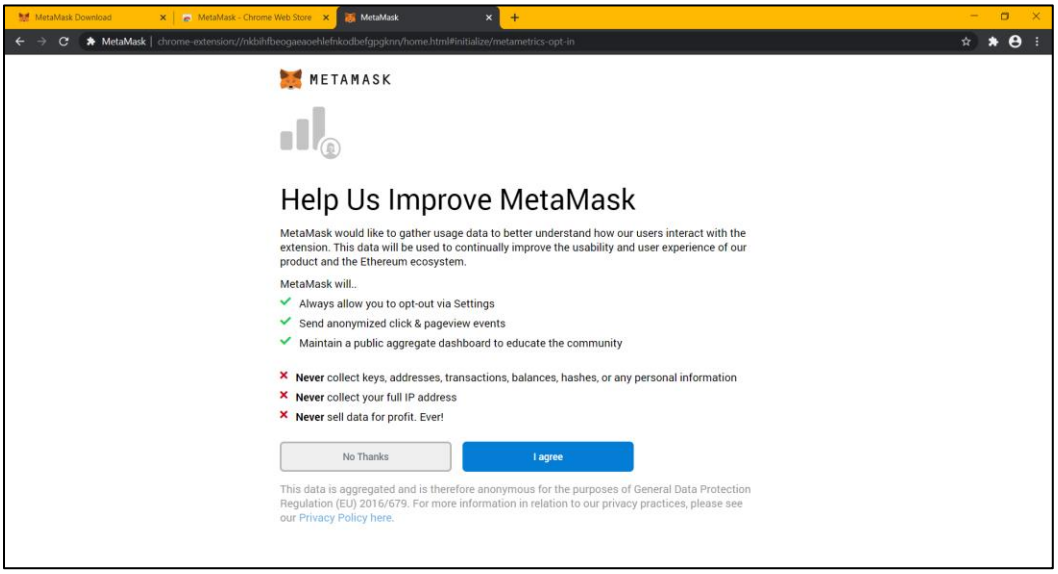
Once the extension has finished installing on Chrome, you will be redirected to the MetaMask installation page.



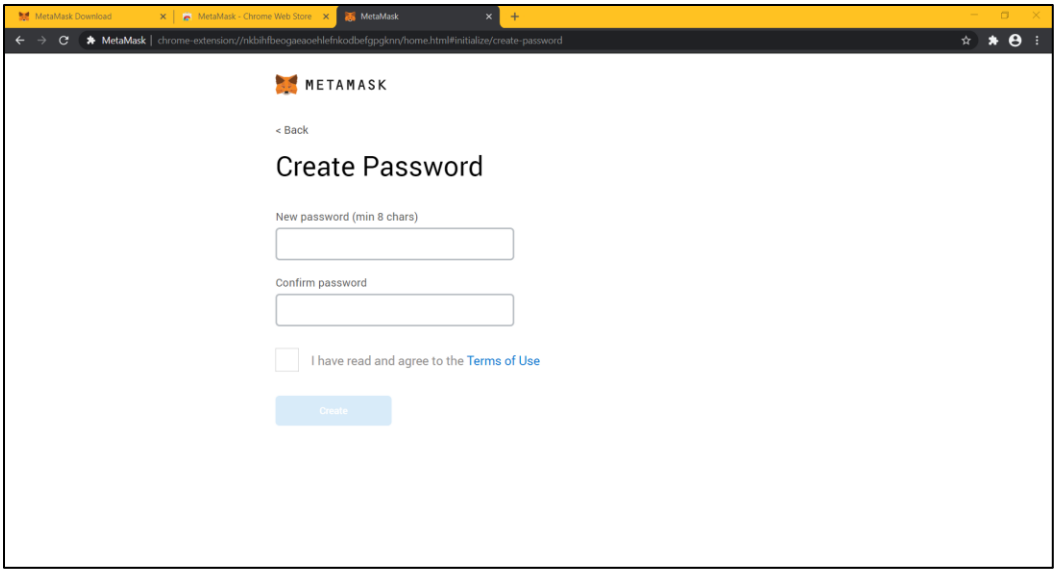
For this activity, we are going to create a new account. If you want to enable an existing account on a new device, you must import your wallet.



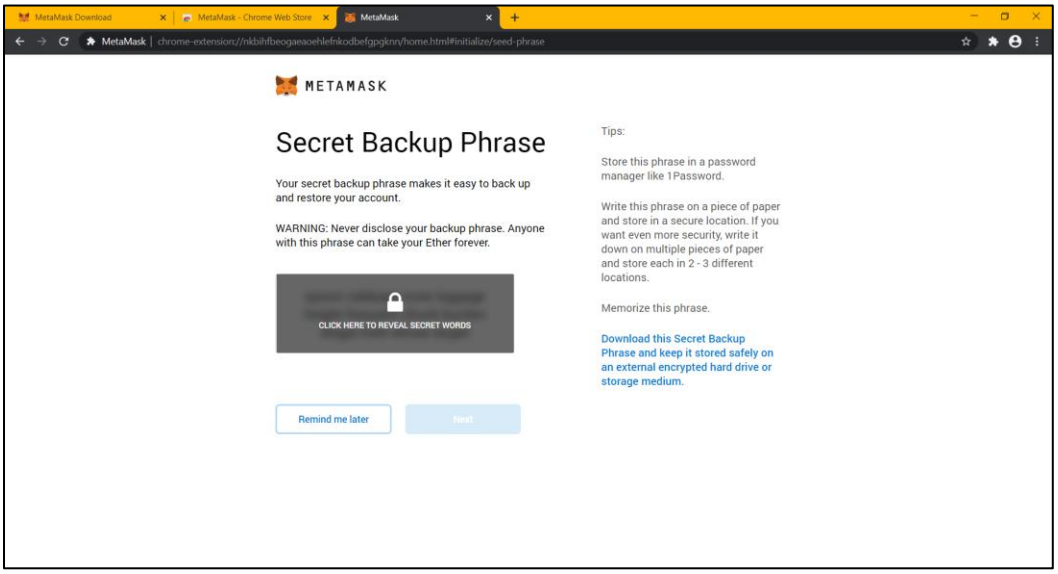
You can choose whether to participate or not in MetaMask's information sharing system by choosing “I agree” or “No Thanks” respectively.



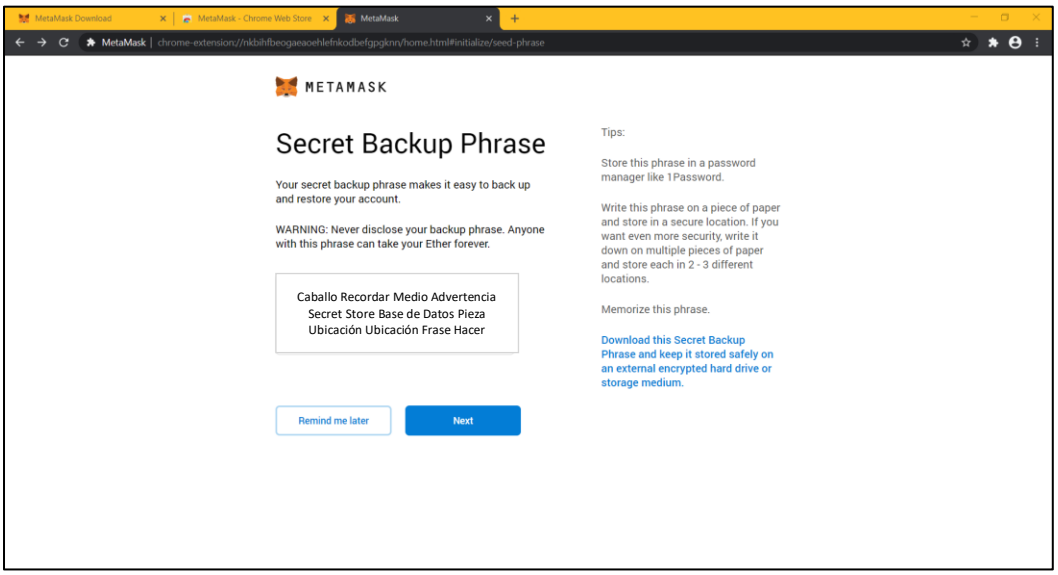
You must create a password for your new account.



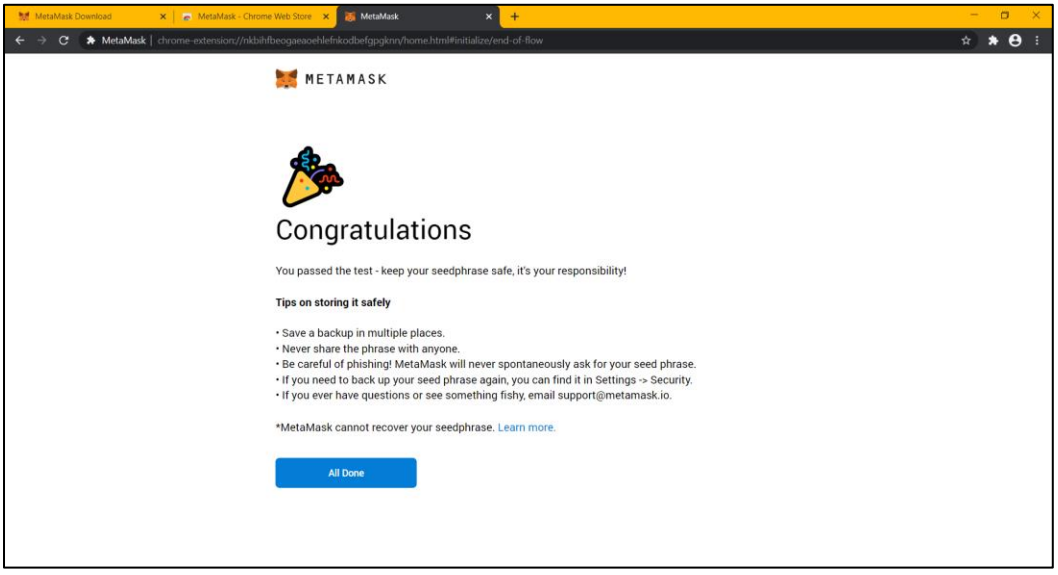
The backup phrase is an important component of the system, since there is no central entity that can reset your password if you forget it. You must store this phrase in a safe place. Click to access the words and store them in the exact same order elsewhere on your device.



Once you click “Next,” you must enter the words of the backup phrase, to confirm that you have stored them (This is also how you can import your wallet to another device).



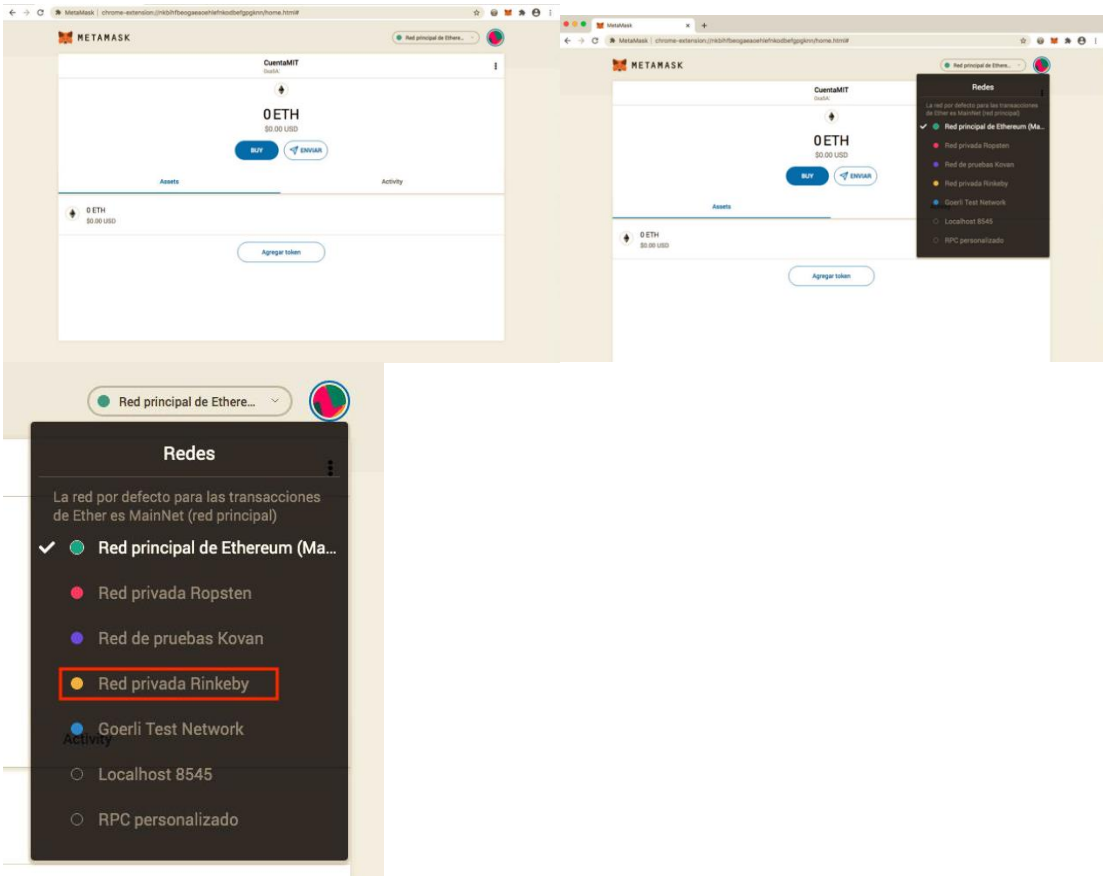
You have now successfully installed MetaMask! The next step is to create some accounts that we can use.



2. *Create an account.*

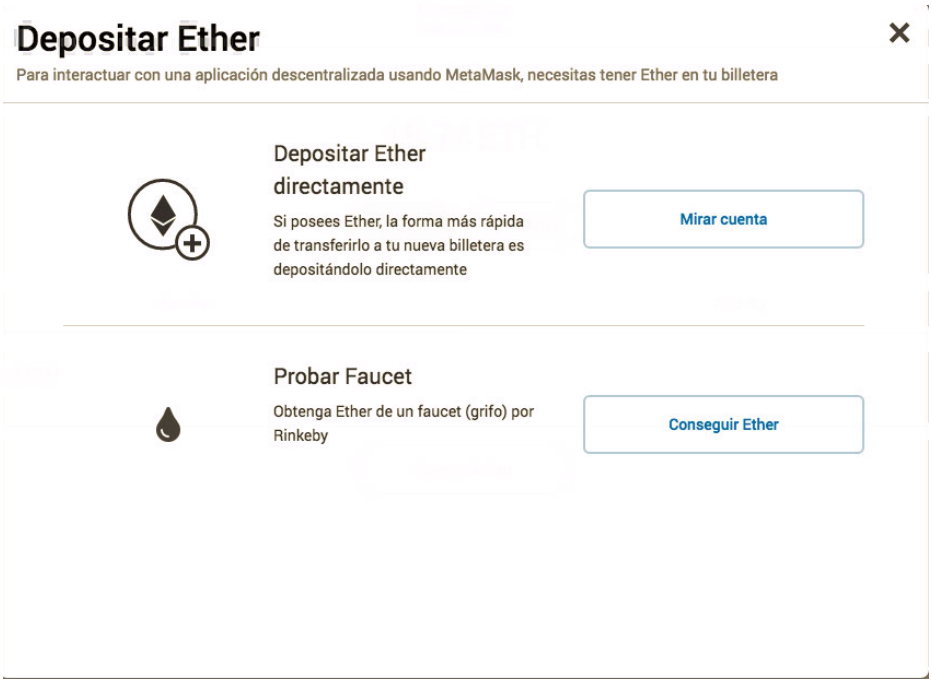
Now that we have installed MetaMask, let us create a new account. In the upper right corner, you can see that we are currently connected to Ethereum's main network, where we can perform transactions with ether. Fortunately, we also have access to test networks where we can use fictitious ether (which is free) to learn how to interact with the network.

Once we click on “Networks,” we will choose the “Rinkeby Private Network.” In the case that they have made the installation in a language different from English this option can also be identified as “Rinkeby Test Network.”

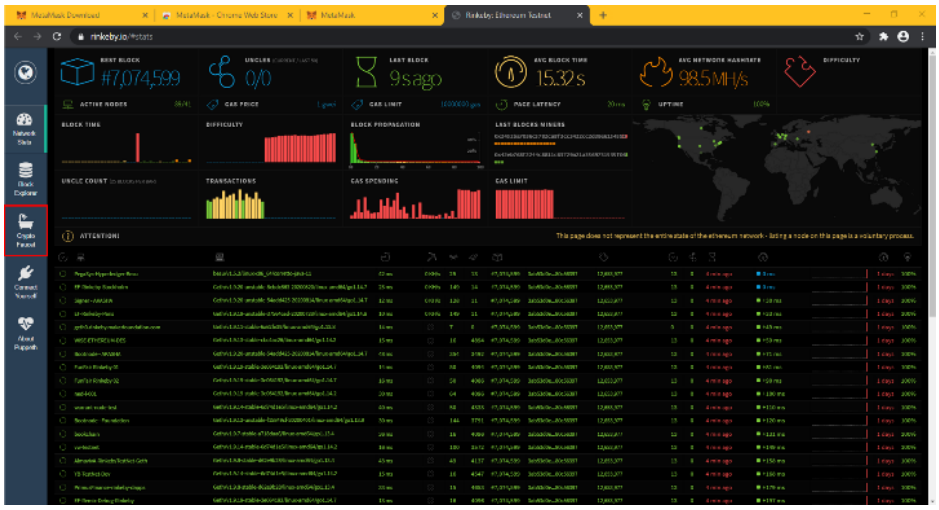


3. *Deposit funds into the account*

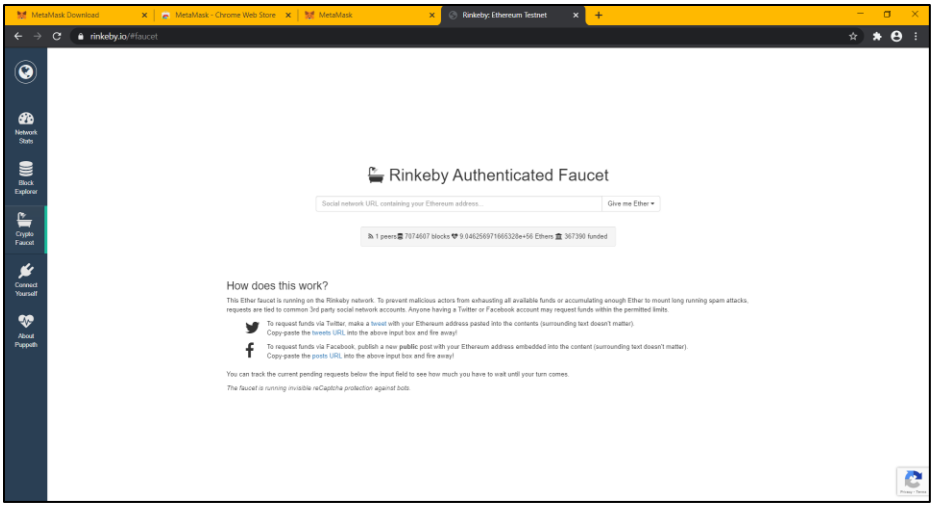
We can deposit funds into our account by clicking on the “Buy” button under the network selection option. This allows us to deposit directly from another source. In this case, we will use the “Test Faucet” option. This is a system designed to generate fictitious Ether, at no cost, with which you can trade on the Rinkeby network.



This will take us to the rinkeby.io website. On the left side of the screen, we will find an icon on the toolbar for the faucet.

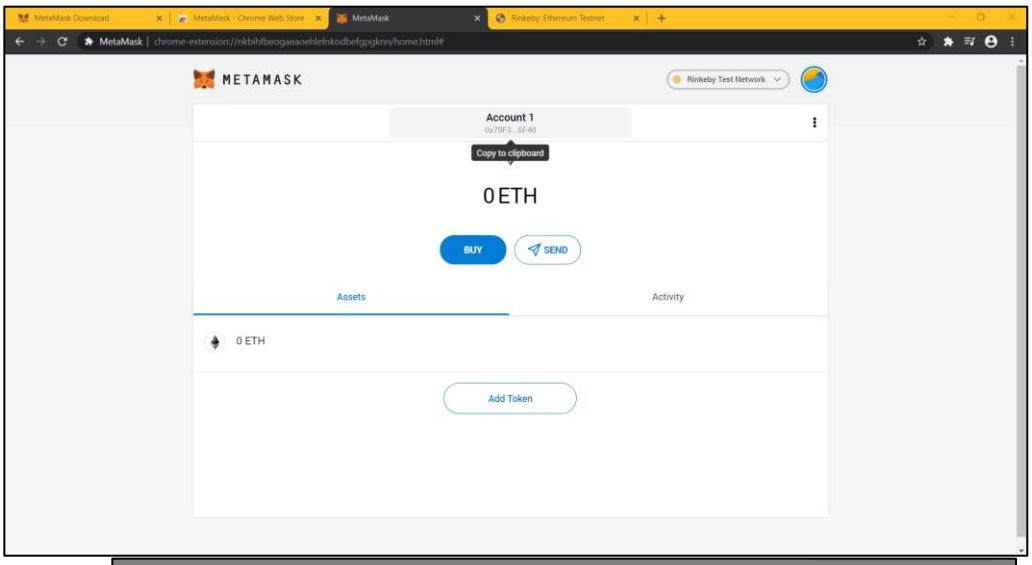


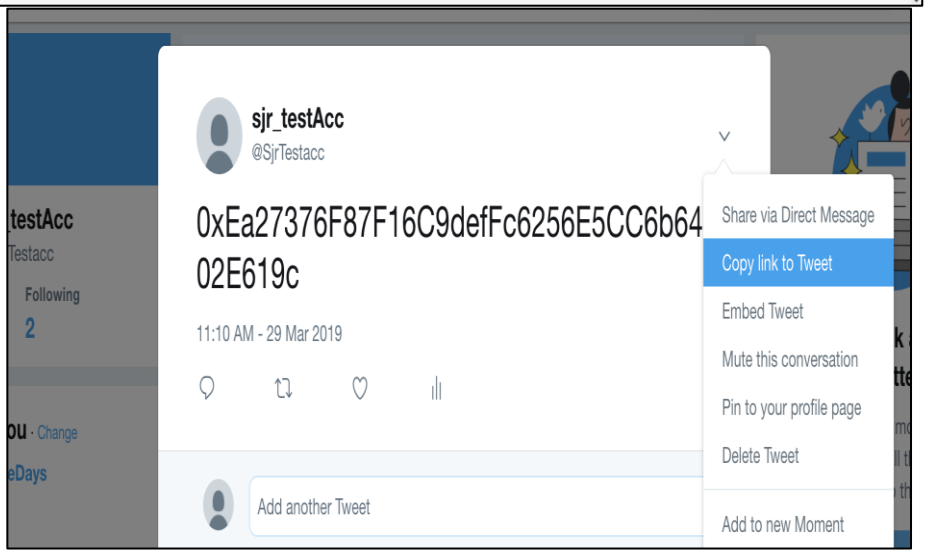
Clicking on it will take you to the faucet´s page.



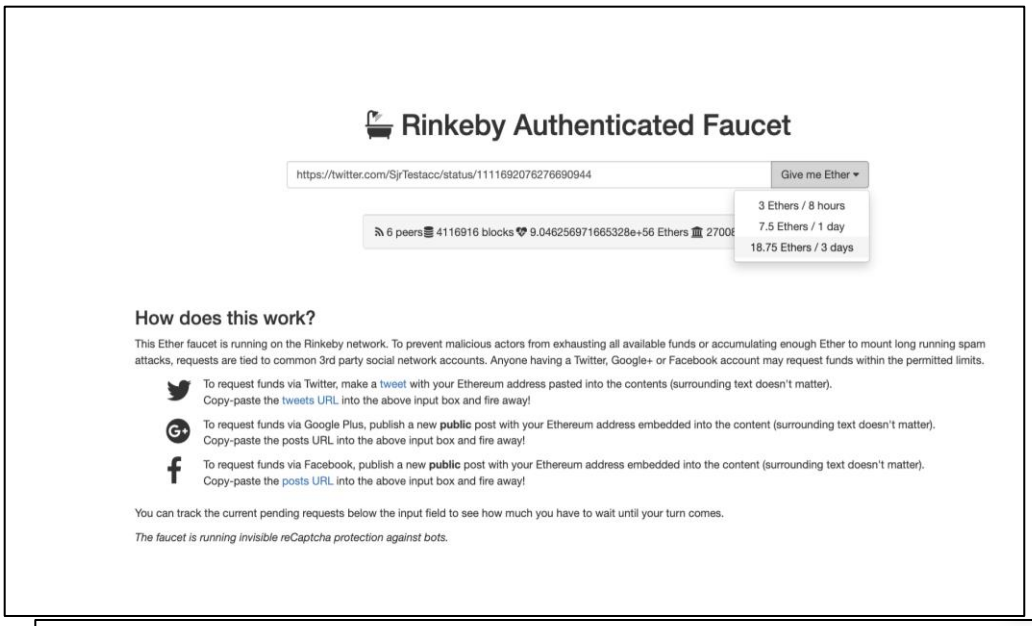
To avoid abuse of its free fictitious ether delivery system, Rinkeby has created a specific process to obtain the ether, that needs to be followed. First, we must return to MetaMask and copy our public key (address). To do this, we click on our account name and it will automatically copy the address into the "Clip board" of your browser. Then, we must log in to a Twitter account (you can create a fictitious Twitter address for this purpose or use the personal one if you have it. Either way, the generated tweet can be deleted after finishing this process). You must tweet the address of your Metamask account (Remember that you copied it in the "clip board" of your browser). Then, copy the address from the URL of the tweet you just launched (and which contains the address of your Metamask account).

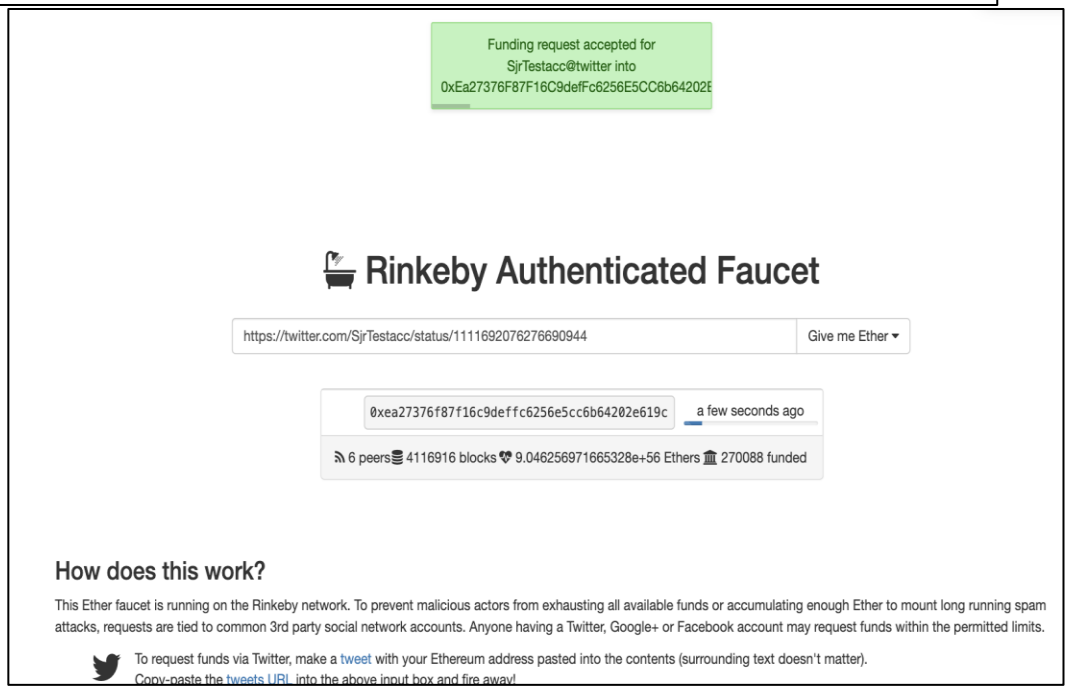
> **IMPORTANT**: Make sure the tweet is public, so that the Rinkeby faucet can access it and verify the address.





Then, we must copy the URL of the tweet into the page of the Rinkeby faucet. On the right side, you can select how many ethers you want to request. We select the lowest possible amount from the drop-down menu. The network will access the tweet, get the address and deposit the funds into your Metamask account.

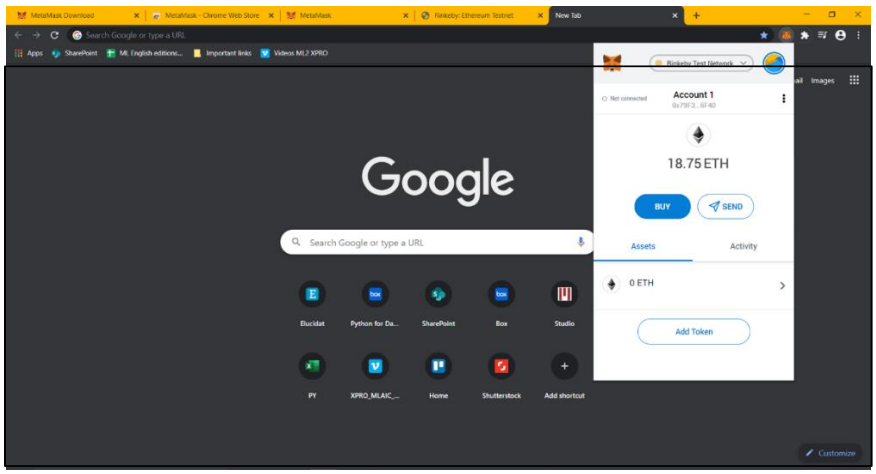




Please note that it may take some time for the funds to reach your account. Under normal conditions, after about 10-15 minutes check your MetaMask extension in Google Chrome and you will be able to see when the funds have been deposited. Once you have the funds in your account, you are completely ready to interact with the Ethereum blockchain.

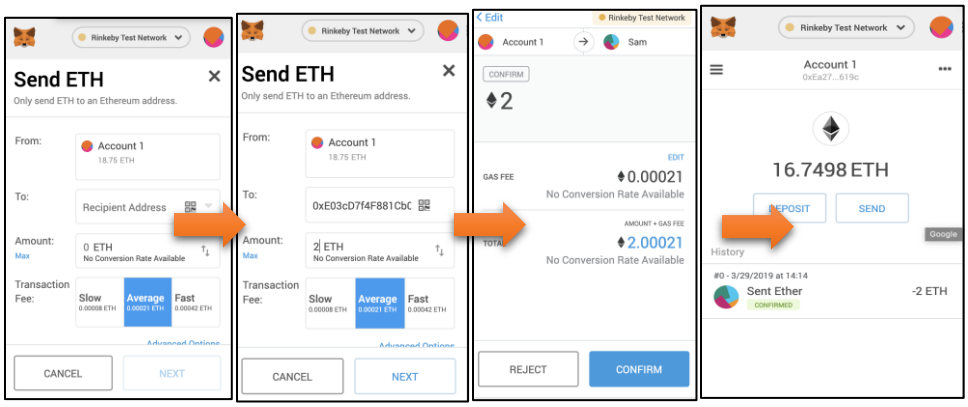
NOTE: Sometimes, it has been the case that high demand for testing funds congests the system and occasionally blocks the ethers transfers from the Faucet. If this happens and you have not received the requested ethers within 24 hours, your facilitator can provide you with some ethers needed to complete the activities. To do this, you must send a message to your facilitator through

the platform´s inbox providing your account´s address (public key). This address is the same as the one posted in the tweet above.



4. *Performing a transaction.*

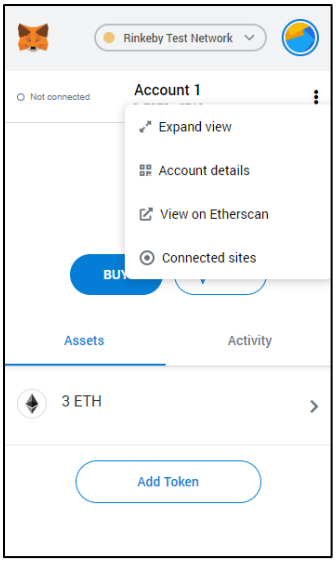
Now that we have some ether, we can perform the simplest action in Ethereum, sending ether to another account. In Metamask, select the "Send ETH" option. It will guide you step by step through the process of sending ether.
IMPORTANT: For question 2, you will be asked to include your name in hexadecimal format. Click here to learn how to do perform this conversion.



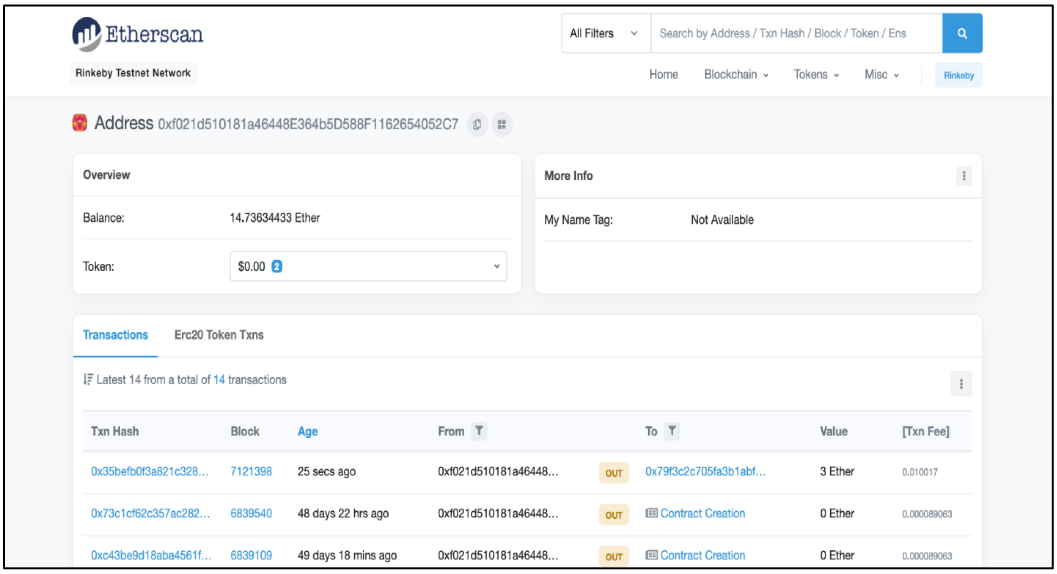
To perform this transaction, send **0.5** ether to the following account: 0xEa27376F87F16C9defFc6256E5CC6b64202E619c. The transaction will be shown as pending, and in approximately one minute, the funds will be withdrawn from your account and the transaction will show as confirmed.

5. *Confirmation of the status and the details of the transaction*

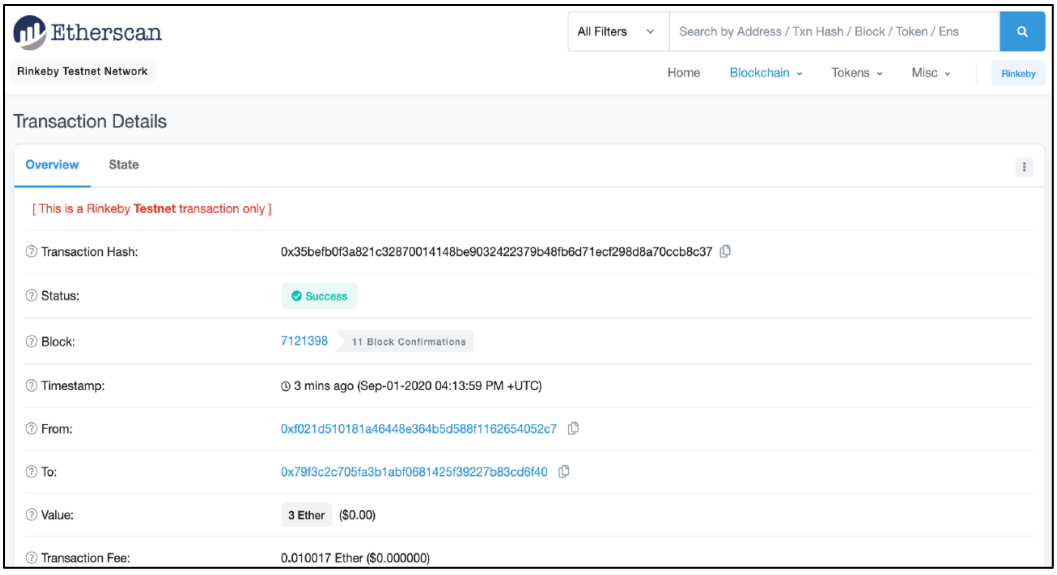
If you click on the three points in the upper right corner of the Metamask window, you can select the "View on Etherscan" option.



This will take us to Etherscan (which we explain in detail in another document of this same activity: "Navigating on Etherscan"). We will be able to see all incoming and outgoing transactions in our account.

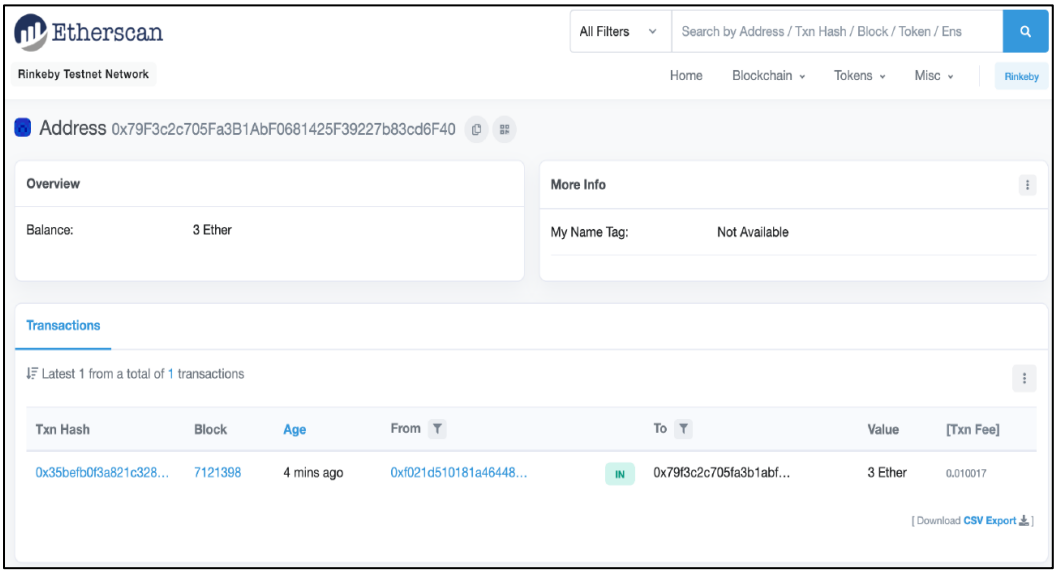


We will see in the first transaction of that list the activity of sending 0.5 ether to the specified account. After clicking on it, it will take us to the "Transaction details" page.



Note that the status of the transaction is marked as “Success.” On this page we also have other information about the transaction available to us, such as the sender´s and recipient´s account addresses. We can also confirm that our transaction has been added to a block, and we could access that block if we wish.

Finally, we may also access the recipient's account to confirm that the transaction appears on their list of recent transactions.



With this information, we can now be sure that our transaction was successful and that the recipient's account will receive the funds shortly.

NOTE

Sometimes the MetaMask icon is not displayed in the browser bar. If you find this situation check that the extension is fixed in the toolbar, for which you must click on the icon of Extensions in the toolbar and verify that the extension is fixed in that bar:

ADDITIONAL INFORMATION

If you are interested in further expanding your knowledge about some of the elements used in this activity after completing it, you can find additional information about Metamask and the different testing networks that exist in the following readings:

- Simple tutorial about Metamask and networks (Spanish):
  - https://www.miethereum.com/guias/metamask/
- Metamask support website:
  - https://metamask.zendesk.com/hc/en-us/community/topics
- Reading related to the different test nets:
  - https://blog.monetha.io/testnet/