

## Steps to become a validator:

Step 1:

Download geth executable and genesis file from the link below:

<https://drive.google.com/drive/folders/1I1CS-pkjKNsZPCFxnDBb86oFdHaYn2gp?usp=sharing>

Step 2: Create a directory for validator node

If you are using ssh then open the terminal, login to ssh and run the following command:

- Create a folder for node to store node data on preferred path by running command  
\$ mkdir node
- Create a data folder inside node folder by running commands  
\$ cd node  
\$ mkdir data

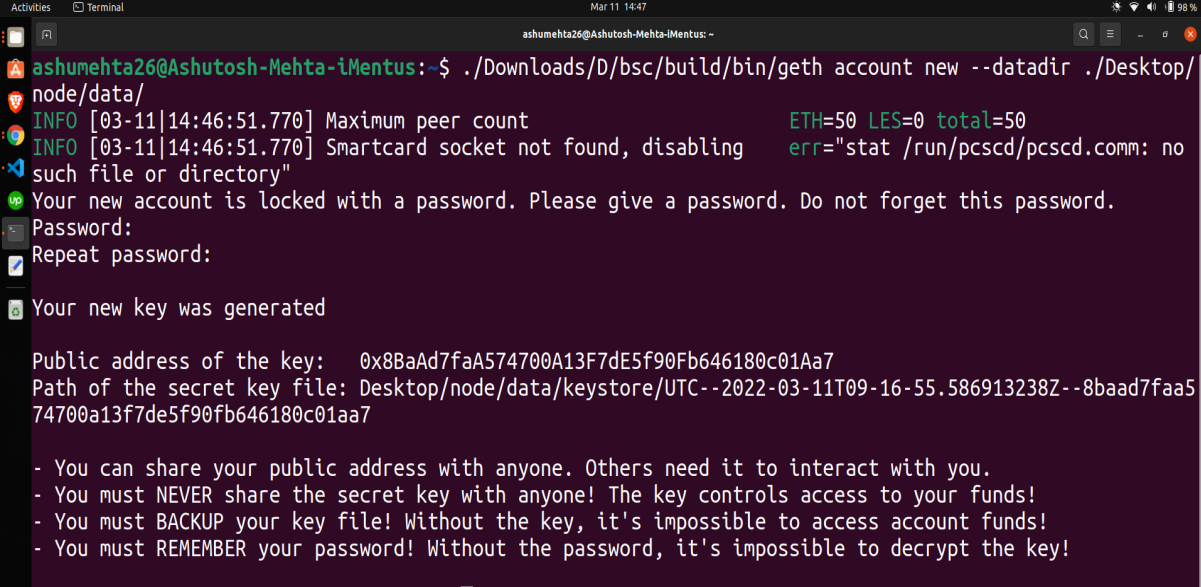
If you are using windows then open the command prompt and run the following commands:

- Create a folder for node to store node data by running command  
\$ mkdir node
- Create a data folder inside node folder by running commands  
\$ cd node  
\$ mkdir data

Step 3: Create an account to become validator using command:

```
$ ./<path of the downloaded geth executable>/geth account new  
--datadir ./<path of the node and data folder>/node/data
```

After executing the command, set a password for your account and press enter, you will see the following output.



```
ashumehta26@Ashutosh-Mehta-iMentus:~$ ./Downloads/D/bsc/build/bin/geth account new --datadir ./Desktop/node/data/
INFO [03-11|14:46:51.770] Maximum peer count          ETH=50 LES=0 total=50
INFO [03-11|14:46:51.770] Smartcard socket not found, disabling  err="stat /run/pcscd/pcscd.comm: no such file or directory"
Your new account is locked with a password. Please give a password. Do not forget this password.
Password:
Repeat password:
Your new key was generated

Public address of the key: 0x8BaAd7faA574700A13F7dE5f90Fb646180c01Aa7
Path of the secret key file: Desktop/node/data/keystore/UTC--2022-03-11T09-16-55.586913238Z--8baad7faa574700a13f7de5f90fb646180c01aa7

- You can share your public address with anyone. Others need it to interact with you.
- You must NEVER share the secret key with anyone! The key controls access to your funds!
- You must BACKUP your key file! Without the key, it's impossible to access account funds!
- You must REMEMBER your password! Without the password, it's impossible to decrypt the key!
```

Account address in the above screenshot is:

0x8BaAd7faA574700A13F7dE5f90Fb646180c01Aa7

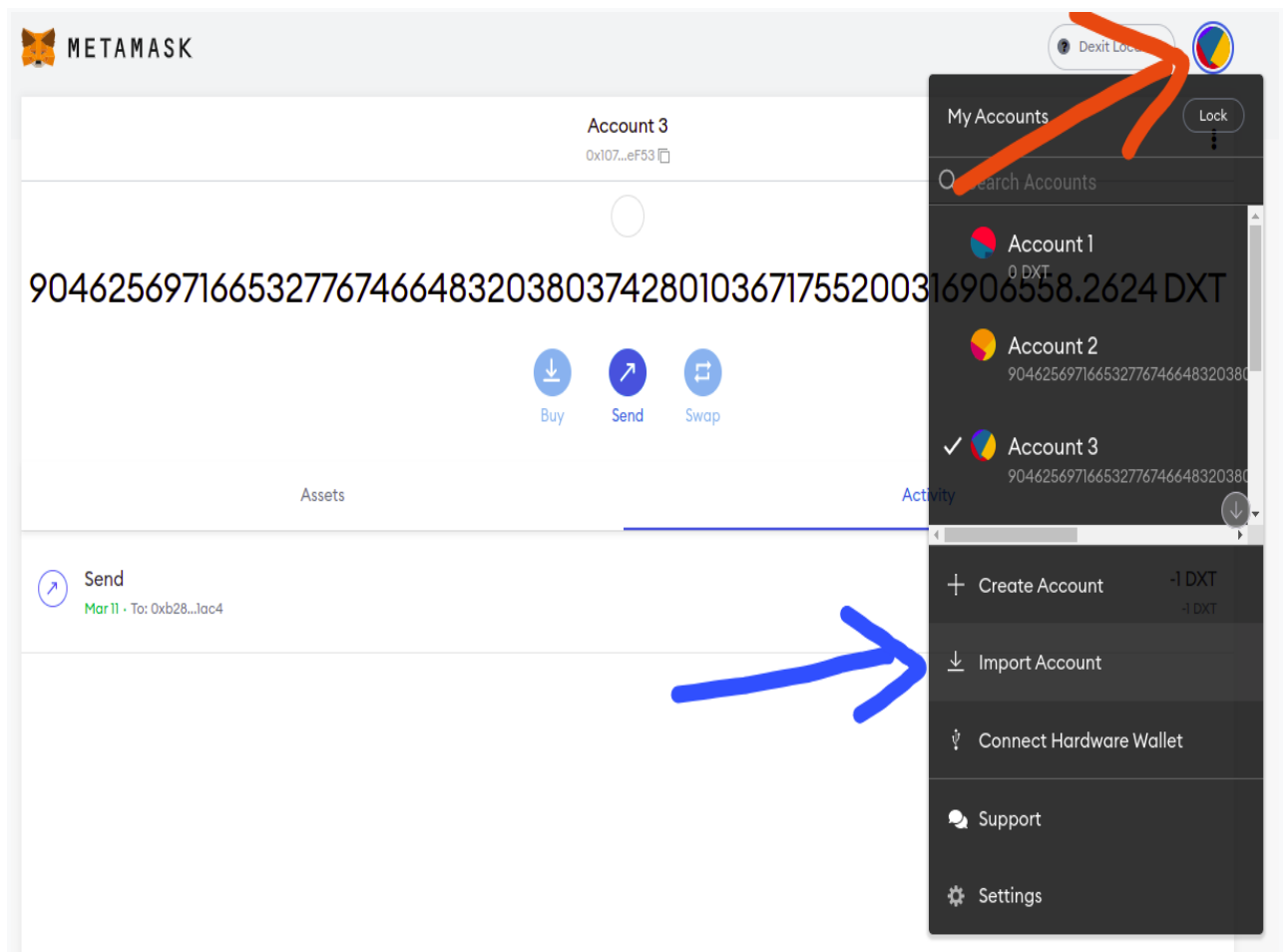
You will get a unique account address while creating an account.

Path of the secret key file:

Desktop/node/data/keystore/UTC--2022-03-11T09-16-55.586913238Z--8baad7faa574700a13f7de5f90fb646180c01aa7

The UTC file in the keystore contains the private key of your account. You must never share the secret file with anyone.

Step 4: Import the account into Metamask using UTC file:



- Click on the button pointing orange arrow, then
- Click on import account. It will show the following prompt.

# Import Account

Imported accounts will not be associated with your originally created MetaMask account Secret Recovery Phrase. Learn more about imported accounts [here](#)

Select Type

JSON File



Used by a variety of different clients  
[File import not working? Click here!](#)

Choose file

UTC--2022...6180c01aa7

....

Cancel

Import

- Change the Select Type from PRIVATE KEY to JSON File.
- Choose the account file from the keystore folder.
- Enter the password of the account (Do not enter the password of Metamask Wallet)
- Then click on import button

Please wait for sometime. It may take few minutes to import the account into Metamask.

After successful import, initialise the node using following command:

```
$ ./<path of the geth executable>/geth init --datadir ./<path of node data folder>/node/data ./<path of the genesis file>/genesis.json
```

```
ashumehta26@Ashutosh-Mehta-iMentus:~/Downloads$ ./bin/geth init --datadir ./D/new/node/data ./D/new/node/dexitlive.json
INFO [01-20|12:42:32.618] Maximum peer count                      ETH=50 LES=0 total=50
INFO [01-20|12:42:32.619] Set global gas cap                      cap=25,000,000
INFO [01-20|12:42:32.619] Allocated cache and file handles       database=/home/ashumehta26/Downloads/D/new/node/data/geth/chaindata cache=16.0MiB handles=16
INFO [01-20|12:42:32.624] Writing custom genesis block
INFO [01-20|12:42:32.631] Persisted trie from memory database    nodes=355 size=50.43KiB time=1.548138ms gcnodes=0 gcsize=0.00B gctime=0s livenode=1 liveness=0.00B
INFO [01-20|12:42:32.632] Successfully wrote genesis state       database=chaindata hash=2abc0e..8eca1c
INFO [01-20|12:42:32.632] Allocated cache and file handles       database=/home/ashumehta26/Downloads/D/new/node/data/geth/lightchaindata cache=16.00MiB handles=16
INFO [01-20|12:42:32.637] Writing custom genesis block
INFO [01-20|12:42:32.643] Persisted trie from memory database    nodes=355 size=50.43KiB time=1.262025ms gcnodes=0 gcsize=0.00B gctime=0s livenode=1 liveness=0.00B
INFO [01-20|12:42:32.643] Successfully wrote genesis state       database=lightchaindata hash=2abc0e..8eca1c
```

Then, run a validator node by running following command:

```
$ ./<path of the downloaded geth executable>/geth --datadir ./<path of the node data folder>/node/data --unlock <Your account public key/address> --mine --allow-insecure-unlock --networkid 899 --bootnodes "enr:-KO4QPc0ZYK2R6Ls8AB4WTnNkrAfNn6NMfbPWTrZpIO6cV6GX6MzllwmF WbYmFK14QpBybKg85FP6G6Nw8BZQ6XpAsQPhGRpZmbAg2V0aMfGhLHCz8 SAgmlkgnY0gmlwhKIA3YeJc2VjcDI1NmsxoQLRIJvt3ilUo1kCeesW-klw4DHiPq wnA-HtNz_2Wi89AIRzbmFwwIN0Y3CCdl-DdWRwgnZf" --syncmode full
```

After running the command, you need to enter the password of the account. Your password will not be visible on the console and output will keep forwarding. Ignore the output forwarding, type the password and press ENTER.

You will successfully unlock the message on the console.

You will see following output as unauthorised validator because staking is not performed yet:

```
ashumehta26@Ashutosh-Mehta-iMentus: ~
ashumehta26@Ashutosh-Mehta-iMentus: $ ./Downloads/D/BSCnoin/bsc/build/bin/geth --datadir ./Downloads/D/new/bscnew/valtest/data --unlock 0x707f21cc97389fdd44b50f8e1b19c287f130ACC --mine --allow-insecure-unlock --networkid 906 --bootnodes "enr:-KO4QPc0ZYK2R6Ls8AB4WTnNkrAfNn6NMfbPWTrZpIO6cV6GX6MzllwmF WbYmFK14QpBybKg85FP6G6Nw8BZQ6XpAsQPhGRpZmbAg2V0aMfGhLHCz8 SAgmlkgnY0gmlwhKIA3YeJc2VjcDI1NmsxoQLRIJvt3ilUo1kCeesW-klw4DHiPq wnA-HtNz_2Wi89AIRzbmFwwIN0Y3CCdl-DdWRwgnZf" --syncmode full
INFO [01-14|12:18:53.708] Maximum peer count                      ETH=50 LES=0 total=50
INFO [01-14|12:18:53.709] Set global gas cap                      cap=25,000,000
INFO [01-14|12:18:53.709] Allocated cache and file handles       database=/home/ashumehta26/Downloads/D/new/bscnew/valtest/data/geth/chaindata cache=16.00MiB handles=16
INFO [01-14|12:18:53.709] Opened ancient database
INFO [01-14|12:18:53.725] Initialised chain configuration
INFO [01-14|12:18:53.727] Initialising Ethereum protocol
INFO [01-14|12:18:53.727] Loaded most recent local header
INFO [01-14|12:18:53.727] Loaded most recent local full block
INFO [01-14|12:18:53.727] Loaded most recent local fast block
WARN [01-14|12:18:53.727] Failed to load snapshot, regenerating
INFO [01-14|12:18:53.727] Rebuilding state snapshot
INFO [01-14|12:18:53.728] Resuming state snapshot generation
INFO [01-14|12:18:53.728] Regenerated local transaction journal
INFO [01-14|12:18:53.728] Generated state snapshot
WARN [01-14|12:18:53.728] Error reading unclean shutdown markers
INFO [01-14|12:18:53.728] Starting peer-to-peer node
INFO [01-14|12:18:53.735] New local node record
INFO [01-14|12:18:53.736] Started P2P networking
e7@127.0.0.1:30303
INFO [01-14|12:18:53.736] IPC endpoint opened
url=/home/ashumehta26/Downloads/D/new/bscnew/valtest/data/geth.ipc
Unlocking account 0x707f21cc97389fdd44b50f8e1b19c287f130ACC | Attempt 1/3
Password:
INFO [01-14|12:18:56.112] Unlocked account
INFO [01-14|12:18:56.112] Transaction pool price threshold updated
INFO [01-14|12:18:56.112] Transaction pool price threshold updated
INFO [01-14|12:18:56.112] Ethersdb automatically configured
INFO [01-14|12:18:56.113] Stored checkpoint snapshot to disk
INFO [01-14|12:18:56.114] Block sealing failed
WARN [01-14|12:18:56.114] New local node record
WARN [01-14|12:18:56.847] New local node record
WARN [01-14|12:18:57.390] Snapshot extension registration failed
INFO [01-14|12:19:03.737] Block synchronisation started
INFO [01-14|12:19:03.738] Mining aborted due to sync
peercount=1 tried=141 static=0
INFO [01-14|12:19:04.000] Looking for peers
INFO [01-14|12:19:04.967] Downloader queue stats
INFO [01-14|12:19:04.982] Imported new chain segment
INFO [01-14|12:19:04.983] Not allowed to propose block
INFO [01-14|12:19:04.984] Commit new mining work
WARN [01-14|12:19:04.984] Block sealing failed
INFO [01-14|12:19:08.122] Imported new chain segment
INFO [01-14|12:19:08.125] Not allowed to propose block
INFO [01-14|12:19:12.123] Imported new chain segment
INFO [01-14|12:19:12.124] Not allowed to propose block
INFO [01-14|12:19:12.124] Looking for peers
INFO [01-14|12:19:16.128] Imported new chain segment
INFO [01-14|12:19:16.128] Not allowed to propose block
INFO [01-14|12:19:20.126] Imported new chain segment
INFO [01-14|12:19:20.126] Not allowed to propose block
err=stat /run/pcscd/pcscd.com: no such file or directory"
number=0 hash=210354..0c2397 tx=1 age=1mo2d19h
number=0 hash=210354..0c2397 tx=1 age=1mo2d19h
number=0 hash=210354..0c2397 tx=1 age=1mo2d19h
err="missing or corrupted snapshot"
root=a2722c..9eac21 accounts=0 slots=0 storage=0.00B elapsed="242.52µs"
transactions=0 accounts=0
accounts=3 slots=0 storage=210.00B elapsed="599.503µs"
errors=LevelDb: not found"
instance=Geth/v1.1.8-859186f2-20220128/linux-amd64/go1.17.8
seq=1 id=4b87aa8177de723a ip=127.0.0.1 udp=30303 tcp=30303
self=node1/0c3e4f57e74612b0083ec2ab1d2ad91c5b9b3197e49cac9b421775901047b18e1c471ac1d7e4d5e964c268fb321407a995468ebbb238f3c7d9d8c6d55e
url=/home/ashumehta26/Downloads/D/new/bscnew/valtest/data/geth.ipc
address=0x707f21cc97389fdd44b50f8e1b19c287f130ACC
price=1,000,000,000
price=1,000,000,000
address=0x707f21cc97389fdd44b50f8e1b19c287f130ACC
number=0 hash=210354..0c2397
number=1 tx=0 gas=0 uncle=0 txs=0 gas=160,209 elapsed=1.927ms
err="unauthorized validator"
seq=2 id=4b87aa8177de723a ip=127.0.0.1 udp=30303 tcp=30303
peer=ecbeebb6 err="peer connected on snap without compatible eth support"
peercount=1 tried=141 static=0
receiptTask=0 blocksTask=0 itemSize=312.50B throttle=8192
blocks=5 txs=7 ngas=0.169 elapsed=13.441ms ngasps=11.919 number=5 hash=c1eb0d..f7980d dirty=2.50KiB
err="unauthorized validator"
number=6 tx=0 gas=0 uncle=0 txs=0 gas=0 elapsed="568.317µs"
err="unauthorized validator"
block=1 tx=0 ngas=0.000 elapsed=1.870ms ngasps=0.000 number=6 hash=e8c001..d0b3ac dirty=2.50KiB
block=1 tx=0 ngas=0.000 elapsed=2.122ms ngasps=0.000 number=7 hash=0f3e8e..f499e0 dirty=2.50KiB
err="unauthorized validator"
peercount=1 tried=131 static=0
blocks=1 txs=0 ngas=0.000 elapsed=2.768ms ngasps=0.000 number=8 hash=75d3a0..b07862 dirty=2.50KiB
err="unauthorized validator"
block=1 tx=0 ngas=0.000 elapsed=2.415ms ngasps=0.000 number=9 hash=5dc832..05d81f dirty=2.50KiB
err="unauthorized validator"
```

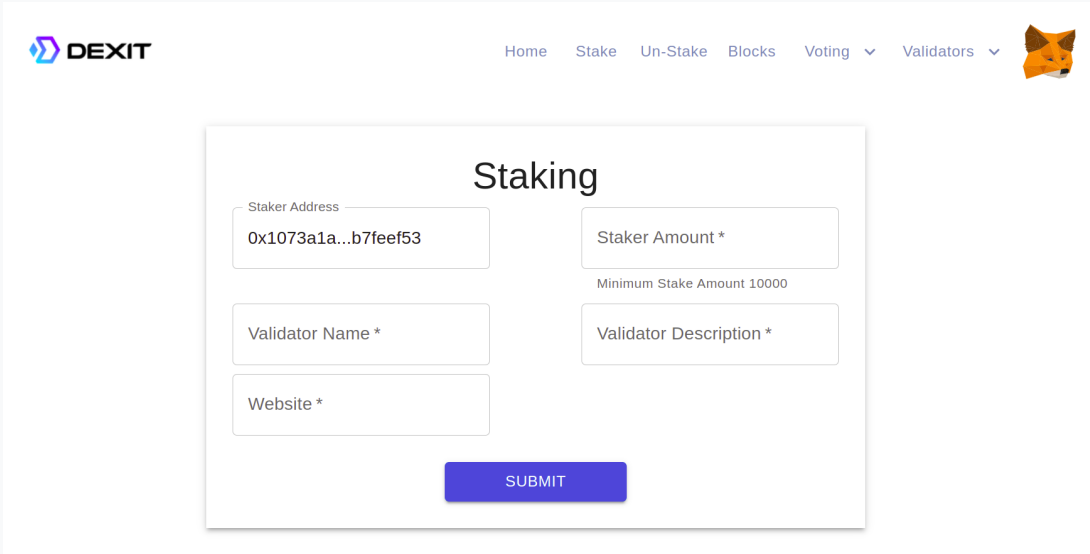
You need to stake DXTs to become a validator.

Steps to stake DXTs to become a validator:

Click on the following link:

<https://testnet.dxtscan.com/staking>

- Connect the Metamask wallet by clicking on the Metamask logo.
- After connecting successfully to your account, click on the STAKE button.
- Select the imported account in Metamask to stake the DXTs

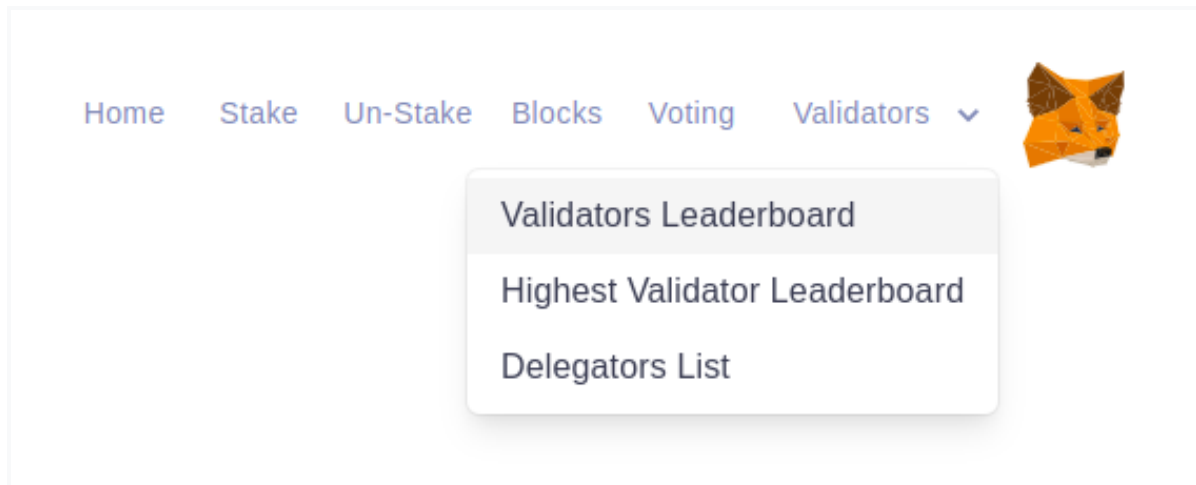


The screenshot shows the DEXIT Staking interface. At the top, there is a navigation bar with the DEXIT logo on the left and links for Home, Stake, Un-Stake, Blocks, Voting, and Validators on the right, followed by a Metamask logo. The main content area is titled "Staking" and contains a form with the following fields: "Staker Address" (pre-filled with 0x1073a1a...b7feef53), "Staker Amount \*" (with a note "Minimum Stake Amount 10000"), "Validator Name \*", "Validator Description \*", and "Website \*". A blue "SUBMIT" button is located at the bottom of the form.

Staker's address will automatically get fetched from Metamask.

- Enter the amount more than 10000, name, description, website of staker, then click on submit button and confirm the transaction in Metamask popup to stake.

After successful staking, you will be able to see your account address in Validators Leaderboard as shown in the screenshot below:



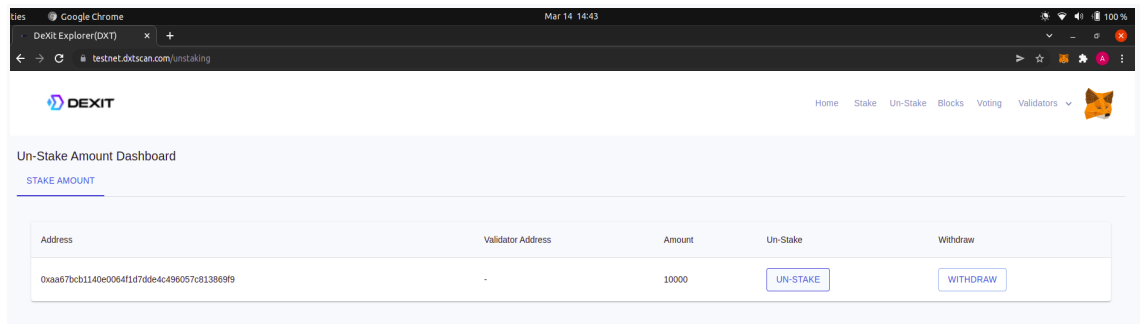
If your staked amount is in the top 21 of all validators, then your account address will also be visible in the Highest Validator Leaderboard and it will start signing blocks after touching the epoch period. If your account is in the list of highest validators then you will see output same as screenshot below.

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
uncles=0 txs=0 gas=0 elapsed="614.819µs"
INFO [03-14|09:00:01.003] Sealing block with number=46 delay=3.996481569s hea
derDifficulty=2 val=0x95eEcd42Ec27db6ea66c45c21289dA4D9092f475
INFO [03-14|09:00:05.005] Successfully sealed new block number=46 sealhash=6b9c6b..5eb823
hash=eacc9f..b5ec36 elapsed=4.001s
INFO [03-14|09:00:05.006] block reached canonical chain number=35 hash=b29eac..7364a6
INFO [03-14|09:00:05.006] Commit new mining work number=47 sealhash=875cdf..a6aa01
uncles=0 txs=0 gas=0 elapsed="690.937µs"
INFO [03-14|09:00:05.006] Sealing block with number=47 delay=3.993803936s hea
derDifficulty=2 val=0x95eEcd42Ec27db6ea66c45c21289dA4D9092f475
INFO [03-14|09:00:05.006] mined potential block number=46 hash=eacc9f..b5ec36
INFO [03-14|09:00:05.373] Looking for peers peercount=1 tried=175 static=0
INFO [03-14|09:00:09.001] Successfully sealed new block number=47 sealhash=875cdf..a6aa01
hash=875511..049cdd elapsed=3.995s
INFO [03-14|09:00:09.002] block reached canonical chain number=36 hash=cbc489..25cd3a
INFO [03-14|09:00:09.002] Sealing block with number=48 delay=3.9978525s hea
derDifficulty=2 val=0x95eEcd42Ec27db6ea66c45c21289dA4D9092f475
INFO [03-14|09:00:09.002] Commit new mining work number=48 sealhash=c71a3e..d7b02a
uncles=0 txs=0 gas=0 elapsed="933.785µs"
INFO [03-14|09:00:09.002] mined potential block number=47 hash=875511..049cdd
INFO [03-14|09:00:13.004] block reached canonical chain number=37 hash=321965..1e1579
INFO [03-14|09:00:13.004] Sealing block with number=49 delay=3.99573242s hea
derDifficulty=2 val=0x95eEcd42Ec27db6ea66c45c21289dA4D9092f475
INFO [03-14|09:00:13.003] Successfully sealed new block number=48 sealhash=c71a3e..d7b02a
hash=3eea39..89b84f elapsed=4.001s
INFO [03-14|09:00:13.004] Commit new mining work number=49 sealhash=e03ae1..fddbee
uncles=0 txs=0 gas=0 elapsed="681.676µs"
INFO [03-14|09:00:13.004] mined potential block number=48 hash=3eea39..89b84f
WARN [03-14|09:00:13.651] Served admin peers conn=127.0.0.1:54500 reqid=3 t="2"
```

Your account will start signing the blocks after passing the epoch block.

In the same way, you can unstake the DXTs by following link:

<https://testnet.dxtscan.com/unstaking>



- Select the account in metamask from which you want to unstake
- Click on the UNSTAKE button of the account you want to unstake
- After successful transaction of unstaking you can withdraw the amount to get it back in your account which can be done by 7 days after unstaking.
- To withdraw the amount you need to click on the WITHDRAW button.

Your node will stop signing the blocks and it will become an unauthorised validator after passing the epoch block.

In order to claim rewards, validators can claim their income by clicking on the CLAIM button.