



Setup Guide

eCredits Validator Nodes

Models: Mars SE / Jupiter LE

Important Notice!



We would like to emphasize and make it absolutely clear, that the monetary aspects should not be the primary motivation and consideration for the node operators.

Especially, not at this stage of the project (pre-market rollout). Currently running validator nodes are meant for early supporters, who do it because they believe in the project, and are willing to actively support its development over the next years.

Although, these validator nodes have a much lower energy consumption compared to the PoW (Proof of Work) miner, they are presently not refinancing themselves. In order to reach this, it will require more transactions on the eCredits Blockchain.

Congratulations on purchasing a pre-configured eCredits Node



With this purchase you have made a huge step towards joining the cutting-edge ecosystem of eCredits as a validator.



We've done the heavy lifting. Your device already contains all dependencies and software to launch your validator node.



If you want to familiarize yourself with the types of nodes in general, you can find additional information on docs.ecredits.com

In this Setup Guide you'll learn how to...

- 1 ... set up your node for mining
- 2 ... verify the status of your node
- 3 ... secure your node
- 4 ... become a fully-accepted validator node



Chapter 1

«Set up your Node for Mining»

Unpacking your Node

Unpack your node, and make sure it's:

- placed on an even, flat surface
- connected to power
- connected to a monitor/display
- connected to a keyboard (to type commands)

Hint: Power it up and wait a moment. The screen should come up and display the eCredits branded login. The first start can take some minutes to initialize.



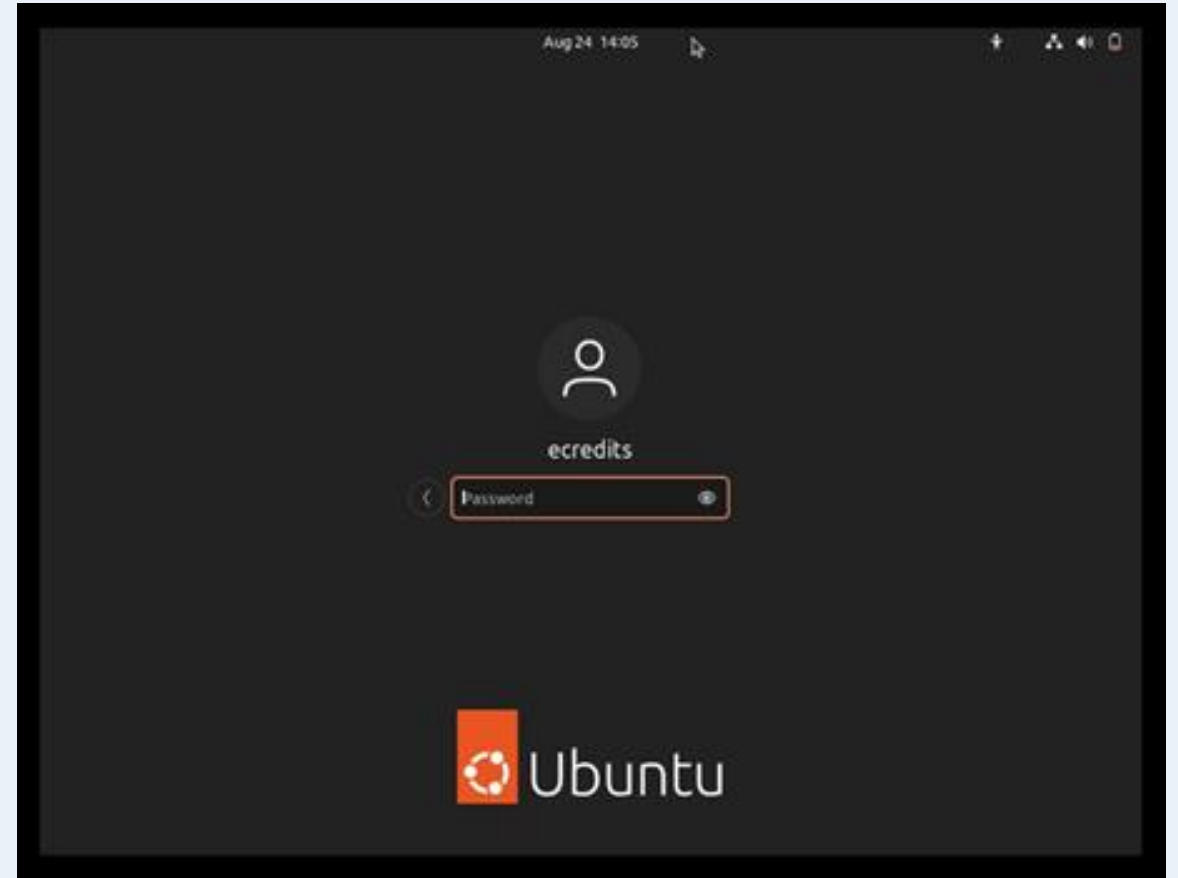
0.1 First Login

Login by selecting the pre-configured User and Master password:

Username: ecredits

Master password: The peoples currency!

Hint: Be sure to type it exactly as shown, with the exclamation point [“!”] symbol at the end.



0.2 Find your eWallet Address

Your eWallet can be found in the eWallet App:

- Download the eWallet App from the [App Store](#) or [Google Play](#) and install it on your mobile device.
- Open your eWallet App
- Click “My eWallet” on the bottom menu
- Select “My address” below your account balance
- Your eWallet address is a long series of numbers and letters, and can be copied directly in the app

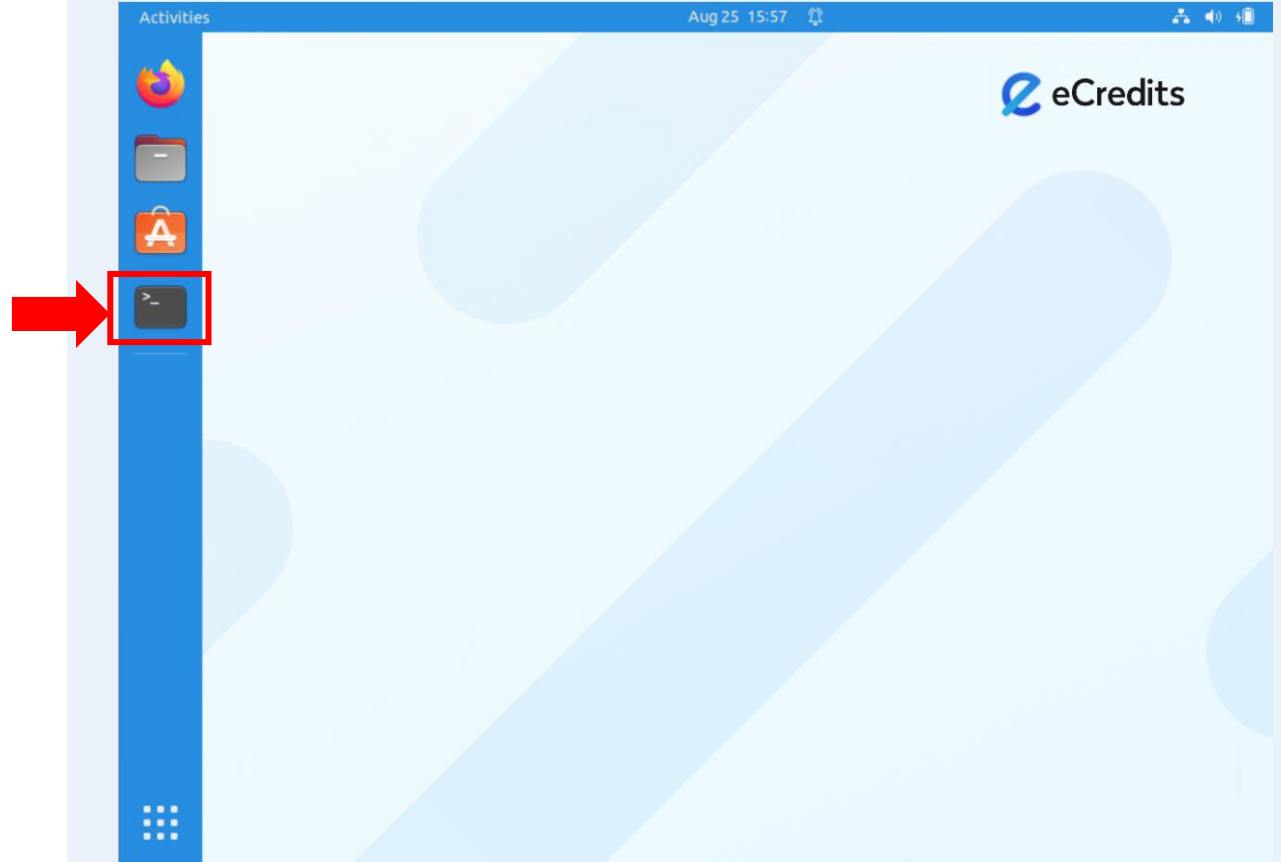


1.1 Enter the Setup Menu

- Make sure your node is connected to the internet
- Enter the Terminal window by clicking the black icon on the left side of the Screen
- In your Terminal window type: “ecredits” and press ENTER
- To start your node, enter the password again:

Master password: The peoples currency!

Hint: To learn about all commands, enter 12 and press ENTER

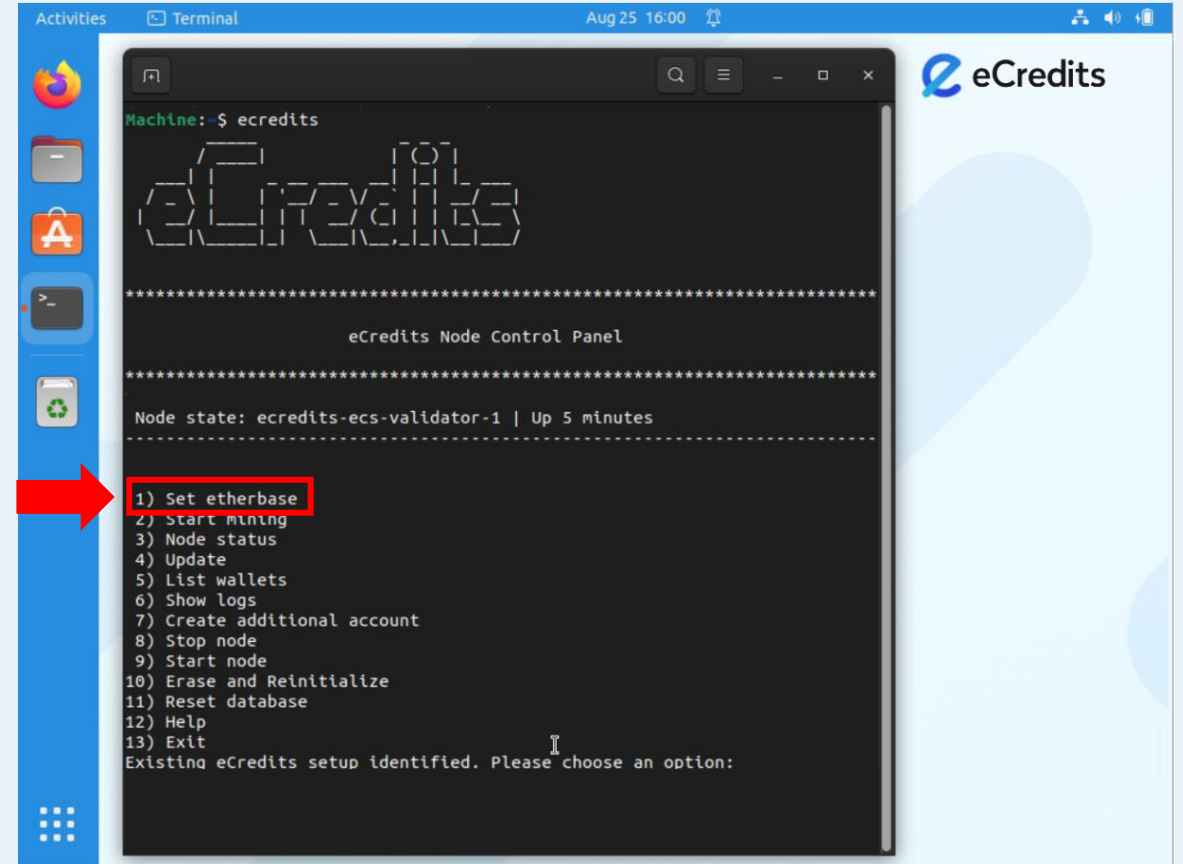


1.2 Set Etherbase Payout Address

This step is important as it configures your node to send your mining rewards to your eWallet Address.

- Start by typing 1 and pressing ENTER
- Copy your eWallet Address here from your eCredits App (see step 0.2) to configure your node's payout address.
- Confirm with Master password.

Master password: The peoples currency!



```
Machine:~$ ecredits
eCredits

*****
eCredits Node Control Panel
*****

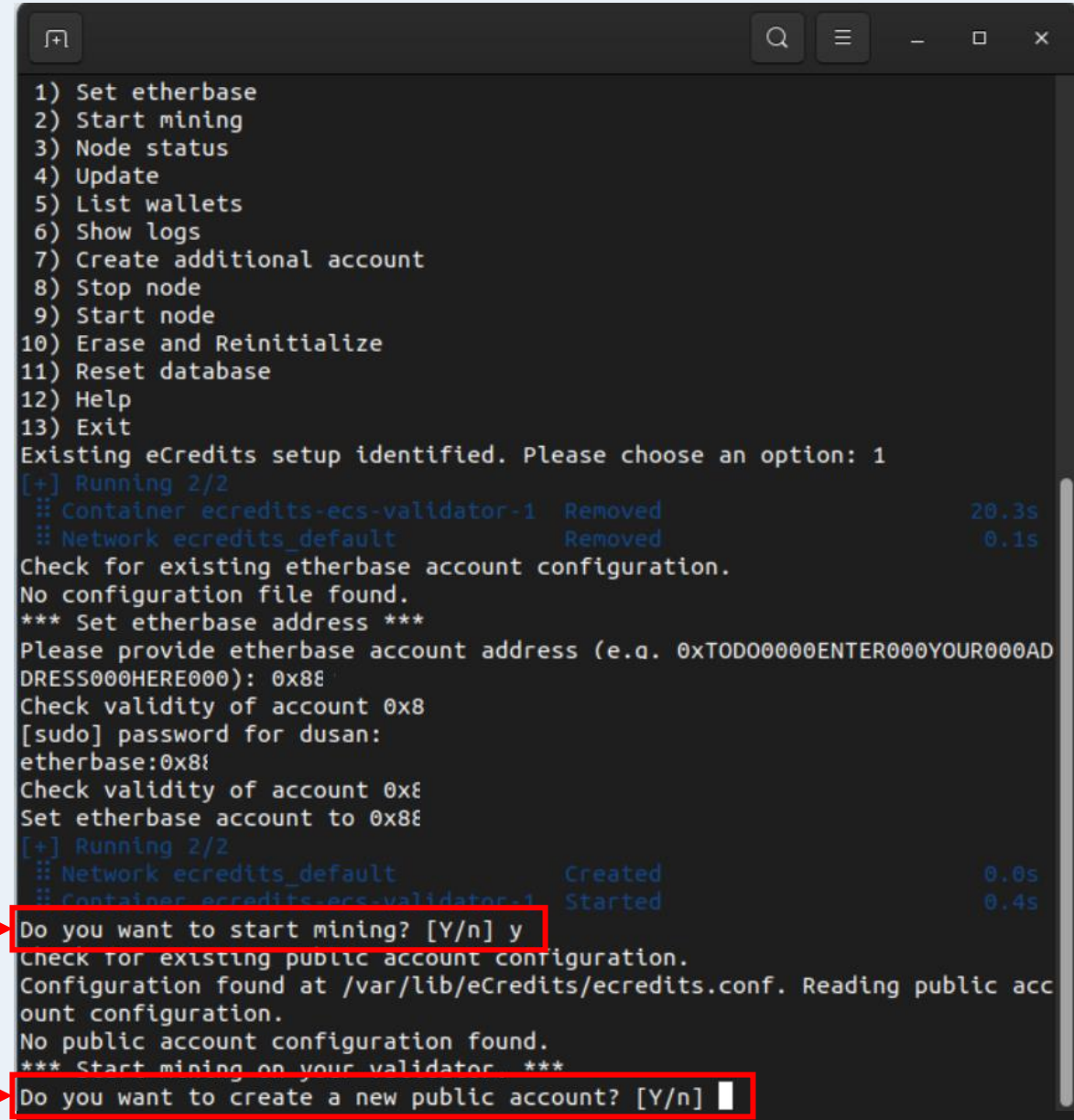
Node state: ecredits-ecs-validator-1 | Up 5 minutes
-----

1) Set etherbase
2) Start mining
3) Node status
4) Update
5) List wallets
6) Show logs
7) Create additional account
8) Stop node
9) Start node
10) Erase and Reinitialize
11) Reset database
12) Help
13) Exit
Existing eCredits setup identified. Please choose an option:
```

2.1 Create a Validator Account

In this step you need to create a validator account address, as this identifies your node in the system. Please be aware this address is **not the same** as the recipient address (etherbase) you set before.

- The screen will show “Do you want to start mining?”
- Type the letter “y” and press ENTER
- The screen will show “Do you want to create a new public account?”
- Type the letter “y” and press ENTER
- Choose and enter a new password for your validator account
- Confirm that password



```
1) Set etherbase
2) Start mining
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8) Stop node
9) Start node
10) Erase and Reinitialize
11) Reset database
12) Help
13) Exit
Existing eCredits setup identified. Please choose an option: 1
[+] Running 2/2
  :: Container ecredits-ecs-validator-1   Removed      20.3s
  :: Network ecredits_default           Removed      0.1s
Check for existing etherbase account configuration.
No configuration file found.
*** Set etherbase address ***
Please provide etherbase account address (e.g. 0xTOD00000ENTER000YOUR000ADDRESS000HERE000): 0x8E
Check validity of account 0x8E
[sudo] password for dusan:
etherbase:0x8E
Check validity of account 0x8E
Set etherbase account to 0x8E
[+] Running 2/2
  :: Network ecredits_default           Created      0.0s
  :: Container ecredits-ecs-validator-1 Started       0.4s
Do you want to start mining? [Y/n] y
Check for existing public account configuration.
Configuration found at /var/lib/eCredits/ecredits.conf. Reading public account configuration.
No public account configuration found.
*** Start mining on your validator ***
Do you want to create a new public account? [Y/n]
```

2.2 Your node's Public Address

Now your node's public address has been generated. This is an address to identify your node in the network.

- Make a note of your public address and the password created in step 2.1. You may need it later
- Copy this public address into the clipboard (you need it in step 2.3)

IMPORTANT: At this step your blockchain may not be synced completely, and your validator node may not be accepted by the community yet, but proceeding is necessary to configure your node. Don't worry, you can check your mining status later at any time.

```
[+] Running 2/2
:: Network ecredits_default          Created          0.0s
:: Container ecredits-ecs-validator-1 Started          0.4s
Do you want to start mining? [Y/n] y
Check for existing public account configuration.
Configuration found at /var/lib/eCredits/ecredits.conf. Reading public account configuration.
No public account configuration found.
*** Start mining on your validator. ***
Do you want to create a new public account? [Y/n] y
Creating a new public account.
INFO [08-25|14:04:26.608] Maximum peer count          ETH=50
LES=0 total=50
INFO [08-25|14:04:26.608] Smartcard socket not found, disabling err="st
at /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: 0x[REDACTED]9
Path of the secret key file: /root/.ethereum/keystore/UTC--2022-08-25T14-0
5-09.280199043Z--e5[REDACTED]099

- You can share your public address with anyone. Others need it to interac
t 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 acces
s account funds!
- You must REMEMBER your password! Without the password, it's impossible t
o decrypt the key!

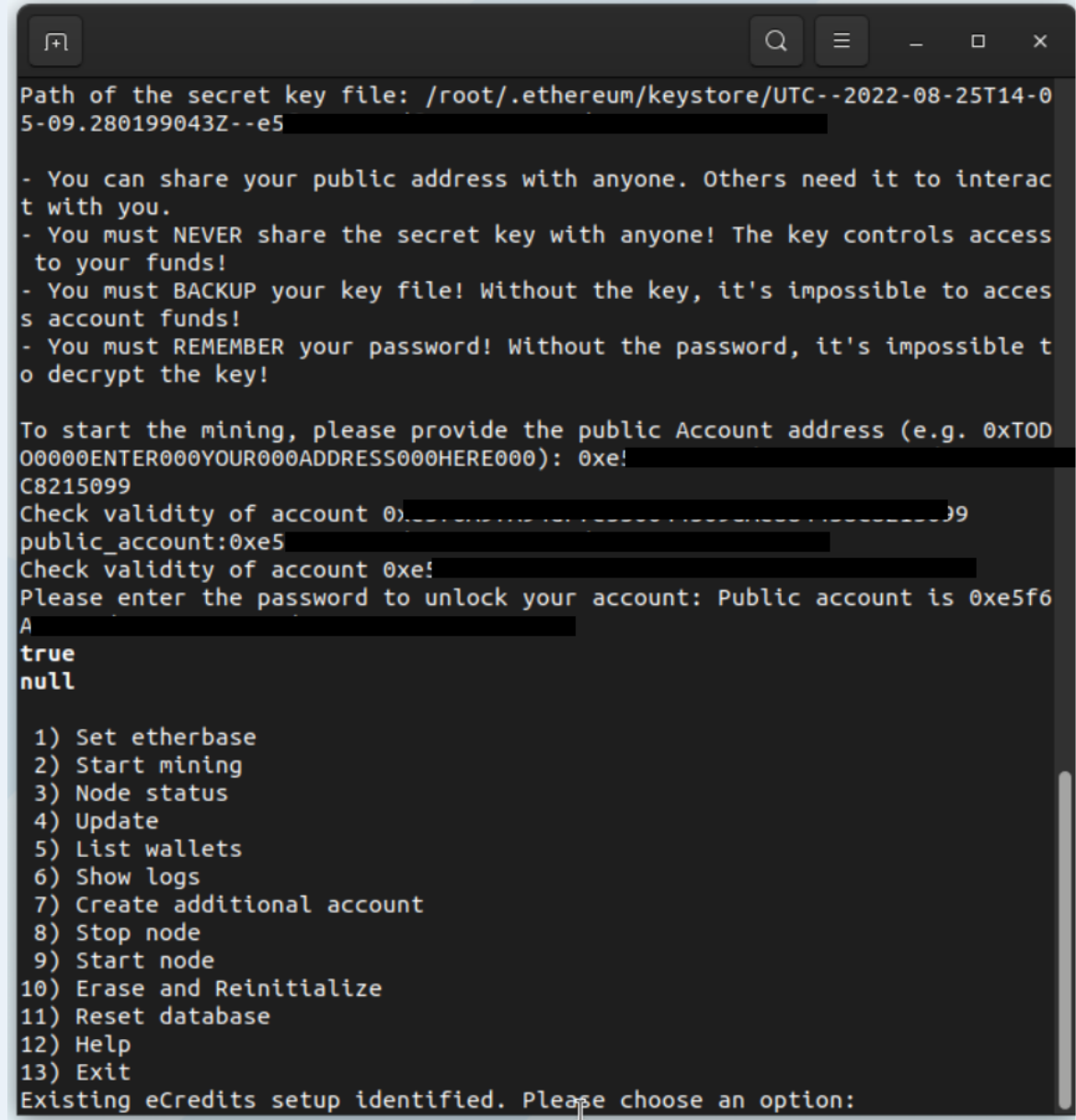
To start the mining, please provide the public Account address (e.g. 0xTOD
00000ENTER000YOUR000ADDRESS000HERE000):
```


2.3 Finalize your Setup

- The screen reads: “To start the mining, please provide the public Account address:”
- Paste your previously generated address and enter the master password again (“The peoples currency!”)
- You are asked for the password you set in account creation: Type in your password and press ENTER
- “true” is displayed – which means it worked

Congratulations!

Your account is unlocked, and your node is ready for mining.



```
Path of the secret key file: /root/.ethereum/keystore/UTC--2022-08-25T14-05-09.280199043Z--e5

- 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!

To start the mining, please provide the public Account address (e.g. 0xTOD00000ENTER000YOUR000ADDRESS000HERE000): 0xe!
C8215099
Check validity of account 0x.....9
public_account:0xe5
Check validity of account 0xe!
Please enter the password to unlock your account: Public account is 0xe5f6A
true
null

1) Set etherbase
2) Start mining
3) Node status
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Existing eCredits setup identified. Please choose an option:
```

Chapter 2

Optional: «Verify the Status of your Node»

3.1 Check the Status of your Node

- To Check the Status of your node, enter the Setup Menu (Step 0.1)
- Select 3 from the main menu ("Node Status") by typing "3" and pressing ENTER

This will give insight into some details about your node. At first, the eCredits Blockchain must be downloaded, which takes time. This process is called SYNC.

IMPORTANT: DO NOT select Point #10 unless you want to restart this entire process. "Erase and Reinitialize" will erase your full configuration and require you to restart this setup. Proceed with caution.

```
.....
                        NODE STATUS
                        press q to exit
.....
Node state: ecredits-ecs-validator-1 | Up 9 minutes
Public Accounts: ["0x6cef2bae3dc2ae36eaf6e5f0ab383f52eb087356"]
Mining started: false
Current peers: 1
Current block: 0
.....
```

3.2 Check if Sync is completed

- As long as current block is displayed at 0 your chain still is syncing
- Once your SYNC is complete, you can find those values changed
- The current block is displayed
- The Mining started: indicates TRUE

Hint: As long as your node is not accepted in the network, mining may be shown as started (true) while you are not rewarded until you are a fully accepted VALIDATOR.

See the next page on how to become accepted validator.

```
|                                     NODE STATUS                                     |
|                                     press q to exit                               |
|-----|-----|
Node state: ecredits-ecs-validator-1 | Up 5 hours
Number of accounts on the node: 4
Public accounts: ["0x6cef2bae3dc2ae36eaf6e5f0ab383f52eb087356", "0x63d372de52333
33c2d1ea6b1404ba4912ac4f43d", "0x742535edc391f8fce9ff09ae25205858039e084f", "0xd
d6c2f889e2e5ec0454e98400c648d3572652f9a"]
Mining started: true
Current peers: 16
Current block: 8145725
|-----|-----|
```


Chapter 3

«Security and Ports»

Firewall Setup

Make sure you opened your firewall ports for:

- **30303** TCP & UDP
- **8545** (only if you want to use RPC access)

System Updates

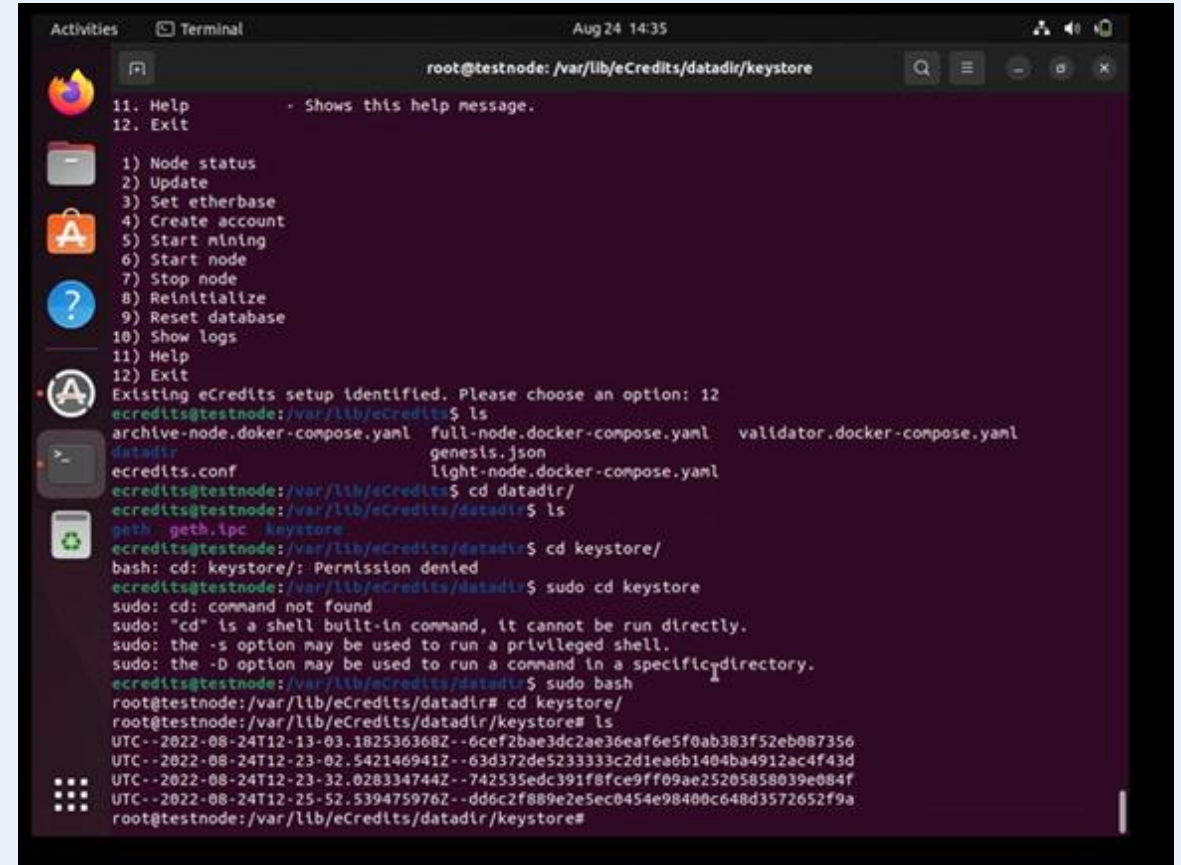
Make sure to periodically update your Operating System (Ubuntu) and patch it with security patches once available. It's your responsibility to keep your Node's System safe.

Backup your Keystore File

To enhance your security and avoid potential issues, we strongly recommend you backup your Keystore file, which is stored only on your local drive on the node at `var/lib/eCredits`.

- Open a terminal window
- type `cd datadir/`
- Type `sudo bash`
- Type `cd keystore`
- Type `cp UTC*.* <your destinationPath>`
- Copy the full folder or copy the individual Keyfile (UTC.....) to your backup location

IMPORTANT: Make sure no one else has access to this file, and never lose access to this file!



```
Activities Terminal Aug 24 14:35
root@testnode: /var/lib/eCredits/datadir/keystore

11. Help - Shows this help message.
12. Exit

1) Node status
2) Update
3) Set etherbase
4) Create account
5) Start mining
6) Start node
7) Stop node
8) Reinitialize
9) Reset database
10) Show logs
11) Help
12) Exit

Existing eCredits setup identified. Please choose an option: 12
ecredits@testnode:/var/lib/eCredits$ ls
archive-node.docker-compose.yaml  full-node.docker-compose.yaml  validator.docker-compose.yaml
datadir                           genesis.json                    light-node.docker-compose.yaml
ecredits.conf
ecredits@testnode:/var/lib/eCredits$ cd datadir/
ecredits@testnode:/var/lib/eCredits/datadir$ ls
geth  geth.ipc  keystore
ecredits@testnode:/var/lib/eCredits/datadir$ cd keystore/
bash: cd: keystore/: Permission denied
ecredits@testnode:/var/lib/eCredits/datadir$ sudo cd keystore
sudo: cd: command not found
sudo: "cd" is a shell built-in command, it cannot be run directly.
sudo: the -s option may be used to run a privileged shell.
sudo: the -D option may be used to run a command in a specific directory.
ecredits@testnode:/var/lib/eCredits/datadir$ sudo bash
root@testnode:/var/lib/eCredits/datadir# cd keystore/
root@testnode:/var/lib/eCredits/datadir/keystore# ls
UTC--2022-08-24T12-13-03.182536368Z--6cef2bae3dc2ae36eaf6e5f0ab383f52eb087356
UTC--2022-08-24T12-23-02.542146941Z--63d372de523333c2d1ea6b1404ba4912ac4f43d
UTC--2022-08-24T12-23-32.028334744Z--742535edc391f8fce9ff09ae25205858039e084f
UTC--2022-08-24T12-25-52.539475976Z--dd6c2f889e2eSec0454e98400c648d3572652f9a
root@testnode:/var/lib/eCredits/datadir/keystore#
```

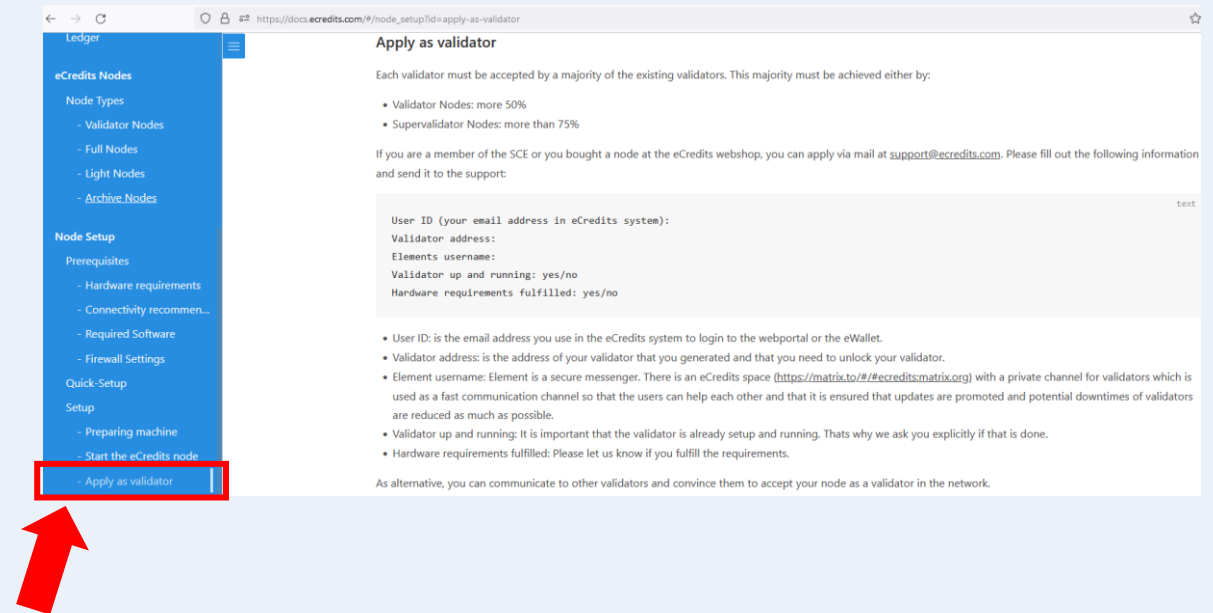

Chapter 4

«Become a fully accepted Validator Node»

Apply to become a Validator Node

You have to apply to become a fully accepted validator node.

- Validator nodes are full nodes that also create and distribute new blocks in the system.
- These nodes can be operated by anyone, but validator nodes must be accepted either by the community or by The People's SCE.
- Validators can apply to be accepted if they are members of the SCE.
- To become a validator, follow the steps on docs.ecredits.com/#/node_setup?id=apply-as-validator





*“Thanks for purchasing this series
of eCredits Validator Nodes!
Together we are building the
foundation of this new economy.”*



Sincerely,
Bernhard Blaha
for The People's SCE