Rocket Pool Node Setup Guide

Capital costs

- 16 ETH
- ~150 – 180 RPL (min 10% collateral)
- Intel NUC ~ 750 CAD (https://www.amazon.ca/gp/product/B08357VWB2/ref=ppx_yo_dt_b_asin_title_o08_s01?ie=UTF8&psc=1)
- 2 x 32 GB RAM Card ~ 440 CAD (https://www.amazon.ca/gp/product/B07N124XDS/ref=ppx_yo_dt_b_asin_title_o08_s00?ie=UTF8&psc=1)
- 2 TB SSD ~380 CAD (https://www.amazon.ca/gp/product/B07MFZXR1B/ref=ppx_yo_dt_b_asin_title_o06_s00?ie=UTF8&th=1)

Setup

1. Configure hardware (https://www.youtube.com/watch?v=HvrLyjJZMtA)
2. Install Linux OS on computer
3. Install rocketpool and play on test net until comfortable (https://www.youtube.com/watch?v=Hj8c4Z9yxxs)
   - Follow along with rocketpool docs (https://docs.rocketpool.net/guides/node/eth-clients.html)
   - Use the default docker-based configuration
   - Select 'locally managed' which is formerly called docker mode which is the default choice
   - Select: Eth 1.0 client – Geth (execution layer)
   - Select fallback execution client: Infura Ethereum project
     - Get Project ID from Infura
   - Select 'locally managed'
   - Select: Eth 2.0 client – Lighthouse (consensus layer)
     - Use infura ETH2 project for checkpoint sync **Remember to change from testnet to mainnet endpoint after mainnet migration**
     - https://docs.rocketpool.net/guides/node/config-docker.html#the-setting-types-and-how-to-use-them
   - Doppelganger detection – 'yes'
   - Enable metrics – 'yes'
4. Secure your node (https://docs.rocketpool.net/guides/node/securing-your-node.html)
5. Start rocketpool & setup wallet (https://docs.rocketpool.net/guides/node/starting-rp.html#checking-the-service-status-and-logs)
6. Prepare your node for operation (https://docs.rocketpool.net/guides/node/prepare-node.html#loading-your-node-wallet)
7. Create minipool (https://docs.rocketpool.net/guides/node/create-validator.html)

8. Once comfortable on testnet, migrate to mainnet (https://docs.rocketpool.net/guides/node/mainnet.html#pool-staking-on-mainnet)
9. Prepare your node for operation (again)
10. Create minipool (again) (https://docs.rocketpool.net/guides/node/create-validator.html)
11. Set up monitoring (https://docs.rocketpool.net/guides/node/performance.html#directly-tracking-your-machine-s-status)

Q/A

-How to have access node from anywhere?

Use Tail scale (https://www.reddit.com/r/rocketpool/comments/rkgyn8/guide_how_to_seamlessly_access_your_rocket_pool/)

-How to secure my node and make it safe?

See Step 4

-How to autoclaim rewards?

By default, the rocketpool_node Docker container (or rp-node service in Native mode) will query the network to check if a checkpoint has passed and new RPL rewards are available to claim. It performs this check **every 5 minutes** and will claim the RPL rewards automatically. The rewards will then be sent to the node's **withdrawal address**, which (hopefully) you have set to an address other than the node wallet.

-How to deposit rewards into ledger?

https://docs.rocketpool.net/guides/node/prepare-node.html#setting-your-withdrawal-address

-How to minimize gas fees?

Enter Rocketpool service config into command line

'TX Fees'(https://docs.rocketpool.net/guides/node/rewards.html#changing-the-max-fee-threshold)

-How to do update?

Operating System:

- Sudo apt update
- Sudo apt dist-upgrade
- Sudo apt autoremove # autoremoves any old versions of packages

- Sudo systemctl reboot #reboots system

Smartnode Stack:

- Rocketpool service stop #pauses services
- wget https://github.com/rocket-pool/smartnode-install/releases/latest/download/rocketpool-cli-linux-amd64 -O ~/bin/rocketpool #downloads latest version
- rocketpool service install -d #runs install
- rocketpool service start #starts back up rocketpool
- rocketpool service version #checks version

-What happens when merge is complete?

Upgrade rocketpool

More rewards

-How to add another mini-pool?

Rocketpool node deposit – add eth (16 or 32 ETH) (https://docs.rocketpool.net/guides/node/create-validator.html#confirming-a-successful-stake)

Rocketpool node stake-rpl (add rpl) – 1.6 ETH minimum and 25 ETH maximum equivalent of RPL

-How to exit?

Rocketpool service stop

Rocketpool minipool refund

Rocketpool minipool exit

-How to switch clients?

'Rocketpool service config' command

-How to check if I am getting slashed?

Use https://beaconcha.in/user/notifications to sign up for notifications

<u>Rocketpool commands:</u>

Type rocketpool service **command** in command line

SERVICE COMMANDS:
   install, i   Install the Rocket Pool service
   config, c   Configure the Rocket Pool service
   status, u   View the Rocket Pool service status
   start, s   Start the Rocket Pool service
   pause, p   Pause the Rocket Pool service
   stop, o   Pause the Rocket Pool service (alias of 'rocketpool service pause')
   terminate, t   Stop the Rocket Pool service and tear down the service stack
   logs, l   View the Rocket Pool service logs
   stats, a   View the Rocket Pool service stats
   version, v   View the Rocket Pool service version information
   install-update-tracker, d Install the update tracker that provides the available system update count
to the metrics dashboard

Type rocketpool node **command** in command line

NODE COMMANDS:
   status, s   Get the node's status
   sync, y   Get the sync progress of the eth1 and eth2 clients
   register, r   Register the node with Rocket Pool
   rewards, e   Get the time and your expected RPL rewards of the next checkpoint
   set-withdrawal-address, w   Set the node's withdrawal address
   confirm-withdrawal-address, f Confirm the node's pending withdrawal address if it has been set
back to the node's address itself
   set-timezone, t   Set the node's timezone location
   swap-rpl, p   Swap old RPL for new RPL
   stake-rpl, k   Stake RPL against the node
   claim-rpl, c   Claim available RPL rewards for the current checkpoint
   withdraw-rpl, i   Withdraw RPL staked against the node
   deposit, d   Make a deposit and create a minipool
   send, n   Send ETH or tokens from the node account to an address

Type rocketpool minipool **command** in command line

MINIPOOL COMMANDS:
   status, s   Get a list of the node's minipools
   refund, r   Refund ETH belonging to the node from minipools
   exit, e   Exit staking minipools from the beacon chain
   delegate-upgrade, u   Upgrade a minipool's delegate contract to the latest version
   delegate-rollback, b   Roll a minipool's delegate contract back to its previous version

set-use-latest-delegate, l If enabled, the minipool will ignore its current delegate contract and always use whatever the latest delegate is

find-vanity-address, v   Search for a custom vanity minipool address

Type rocketpool wallet status – to get address of node wallet