

Project Title

Beaconcha.in

Description

[Beaconcha.in](#) is an [open source](#) Ethereum 2.0 explorer which makes the beacon chain accessible to non-technical users.

In addition, beaconcha.in provides an [open source mobile app](#) for iOS and android for validator monitoring.

Vision

The vision of beaconcha.in is to not rely on closed-source explorers; everyone should be able to run its local explorer and not trust third parties.

Beaconcha.in is not only an explorer. Due to the upcoming change from PoW to PoS, there has been demand by individual node operators to have an easy to use node/machine monitoring tool.

Problem

Nowadays, the UX of a specific blockchain is highly dependent on its explorers.

Fear spreads among the community the moment an explorer is down, even though the network is unaffected.

Solution

To tackle this problem, we are building an open source beaconchain explorer.

Additionally, with the upcoming change to PoS, home-staking should be the gold standard for staking on Ethereum. Thus, beaconcha.in has an open source mobile app to monitor their validators, so individuals can stake with a peace of mind when they're not at home.

Product Features

- Basic visualization of [blocks](#) and [epochs](#)
- Public [API](#) endpoints
- [Staking Pool](#) performance monitoring
- [Dashboard](#) for validator monitoring
- Various tools to export income for tax purposes [\[1\]](#)[\[2\]](#)
- [Notification center](#) for
- Validator duties (missed attestations, block proposal, slashed, sync committee)
- Client updates (geth, besu, nethermind, Lighthouse, Prysm, Teku, Nimbus)
- [Machine monitoring](#) (CPU spikes, Memory, Storage)
- Open Source [Mobile App](#) for iOS and Android
- [Client Metric exporter](#) for mobile monitoring

Validation

Please validate our efforts in the following github repositories:

1. [Beaconcha.in](#) explorer: [\https://github.com/gobitfly/eth2-beaconchain-explorer

[\]\(https://github.com/gobitfly/eth2-beaconchain-explorer\)](https://github.com/gobitfly/eth2-beaconchain-explorer)

1. Beaconcha.in [mobile app](#) (iOS & android)

[\https://github.com/gobitfly/eth2-beaconchain-explorer-app

[\]\(https://github.com/gobitfly/eth2-beaconchain-explorer-app\)](https://github.com/gobitfly/eth2-beaconchain-explorer-app)

Progress

Over the past 2 years, beaconcha.in has become the go-to explorer for researchers, developers and end-users.

Compared to PoW, the beaconchain has a lot of data that needs to be processed every epoch (6.4 minutes). Beaconcha.in will require frequent database improvements to be able to display recent data from the beacon chain...

All of the mentioned features (Product Features) are fully implemented and can be used today.

Differentiation

As of today, there is only one (closed source) explorer with similar features <https://beaconscan.com/>.

Team

Beaconcha.in was founded by bitfly gmbh, and is currently maintained by 3 developers.

Grant Request

\$50,000

What the funds are used for

The funds will be solely used for server costs and maintenance. Currently, beaconcha.in supports 4 networks (Mainnet, Prater, Sepolia and Ropsten).

Links

- Explorer <https://beaconcha.in/>
- Mobile app [Ethereum 2.0 Beacon Chain \(Phase 0\) Block Chain Explorer - Beaconchain Dashboard - beaconcha.in - 2022](#)
- Twitter https://twitter.com/beaconcha_in

Additional Information

beaconcha.in (and etherchain.org) are products by bitfly, which have been financially covered by Ethermine. This was a way for us to give back to the community, however, for known reasons, Ethermine won't be able to cover these expenses for much longer.

As a short term solution, we applied to various grants (listed below) and plan to apply as a node operator at Lido in the next wave.

For transparency reasons a list of pending and declined grant applications:

- Gitcoin (approved)
- CLR (approved)
- daohaus (declined, for now)
- Uni grants (pending)
- EF (pending)