TL;DR

This proposal seeks support from Lido DAO to allocate funds to Ebunker for the enhancement of eNode Core, a comprehensive one-click setup tool designed for Ethereum validators and operators. The objective is to integrate it with Lido's SDVTM, which harnesses the power of Distributed Validator Technology (DVT) on mainnet through Obol Network and SSV Network implementations. This integration will utilize the advantages of distributed validation to significantly enhance security and decentralization. It aims to streamline the onboarding process for new, permissionless operators, with a particular focus on home-stakers, thereby fortifying Lido's network against potential threats and further decentralizing its operations. With an estimated duration of 6 weeks, the project requires a budget of 52,000.00 DAI, and we are seeking Lido's support for this initiative.

Proposer

Allen, Todd, and Jenny on behalf of Ebunker.

About Ebunker

Ebunker, a pioneering non-custodial ETH staking service provider, offers Staking as a Service (StaaS) and Validator as a Service (VaaS). Our innovative approach has led to substantial growth, with over 31,600 Ethereum currently staked in our system. We are a strategic partner of Lido, managing 8,906 nodes, and are actively involved in DVT and SSV testing with Lido. Our long term partnerships with SSV and Obol underscore our deep expertise and extensive experience within the Distributed Validator Technology (DVT) domain. Collaborating closely with these renowned entities, we have been at the forefront of testing and implementing cutting-edge DVT solutions. Our significant contribution, aside from staking services, is the development of eNode, a home-use Ethereum validator device that democratizes access to Ethereum's network for individuals.

eNode Core Overview

eNode Core, Ebunker's robust platform for Ethereum network validators and node operators, is currently operational on the innovative eNode Box hardware. It is designed to simplify the complex process of setting up Ethereum validators, making it accessible even to those new to Ethereum network participation.

eNode Core boasts a dynamic range of applications, including Execution Layer Client Apps (Geth, Nethermind, Besu, Erigon), Consensus Client Apps (Prysm, Lighthouse, Teku, Lodestar), MEV-BOOST App, Ethereum Validator Manager App, Ethereum Validator Monitor App, SSV DVT Operator App, and Obol DVT Operator Monitor App, each contributing to a fortified and efficient network operation.The platform is poised for future deployment on standard Linux systems, enhancing its accessibility. Current key features of eNode Core include:

· App Store Module: An ecosystem for applications, featuring an automatic online-upgrade mechanism.

· App Safety Guard Firewall: Ensuring the security of operations within the platform.

· Turn-key Solution with a Graphic UI: A user-friendly and intuitive interface, significantly simplifying the user experience.

These features underscore eNode Core's capacity to provide a comprehensive, secure, and user-friendly environment for Ethereum network participation.

Project Objective and Summary

As a long-term supporter of Lido, Ebunker aims to reinforce its decentralization goals and is committed to accelerating this process by integrating SDVTM (Simple Distributed Validator) technology into eNode Core.

This enhancement of eNode Core can make it more accessible and efficient for community stakers to participate in the decentralized Lido ecosystem. Setting up an Ethereum Validator has traditionally been a lengthy and technically challenging endeavor, with substantial economic and time investments required to establish a complete Ethereum node infrastructure. Addressing this, Ebunker has developed the eNode-Box product, offering a low-cost, low-barrier, and high-efficiency solution for home-stakers to run ETH nodes through an integrated hardware and software package.

The software component, eNode-Core, allows users to quickly set up a full suite of Validators, Lido Operators, SSV Operators, and Obol Operators using a Graphic UI on the eNode-Box, drastically reducing complexity. Furthermore, the future capability of eNode-Core to run on standard Linux servers will greatly simplify the Ethereum setup task even more.

By facilitating easier access to Ethereum network validation and lowering the entry barriers, eNode Core's integration with SDVTM is poised to empower a greater number of individuals to become home-stakers, thus contributing to the network's security and pushing forward the vision of a more decentralized ecosystem.

Scope for Integration with Lido SDVTM

Ebunker will deliver the following features and updates to eNode-Core over the span of 6 weeks:

Tier 0 Integration:

● Develop a new application called Lido-SDVTM App within the eNode-Core platform, which users can download and run from the eNode-Core App Store. This app will integrate Tier 0 features:

● Setup of Ethereum validation tools (CL and EL nodes, Validator client, MEV-Boost), already implemented in CL App, EL App, MEV-Boost App, and System Dashboard. Users can simply download and run these apps, and everything will be set up automatically.

● Dashboard for CL/EL Ethereum Client to show syncing status.

● Dashboard for eNode system status, displaying CPU/Mem/Disk status.

● Simple DVT/Obol-Operator App module served as a web page and backend API. Users can download and run the app, allowing DVT operator functionality including DKG. It enables the setup of cluster information and implements a backend API in eNode-Box or Linux system. The Lido-SDVTM App interacts with the backend API to generate Key-Share and Obol DKG, transferring key shares to the specified Obol Cluster. Users can generate Validator keys via Graphic UI, similar to eNode Validator Management App, and save the mnemonic securely. The later version will support SSV with additional development.

● Configuration of Withdrawal Credential with default Lido withdraw SDVTM Node Operator address.

Tier 1 integration:

● A web page dashboard shows capabilities once connected to a wallet:

● Node Operator keys and queue info page

● Node Operator bond and rewards info page

● Alert page for Penalties and Exit requests

● Interacts with Lido CSM contracts to retrieve required information via read functions.

● Wallet serves as a multi-signed address, enabling all DVT-Cluster members to view Operator information.

Tier 2 integration:

● A web page, requiring connection to a wallet.

● Users can manage operators for the connected wallet address, interacting with SDVTM contracts:

● Adding a new node operator

● Visualizing required bond to upload keys

● Uploading new keys

● Visualizing Current bond amounts

● Claiming rewards

● Visualizing Rewards available to claim

● Setting up a dedicated manager and reward addresses

● All functions interact with SDVTM contract.

● Wallet serves as a multi-signed address, requiring actions to be invoked by any DVT-Cluster member and completed once enough signing is done.

Tier 3 integration:

● Implementation of all functions through an app developed with eNode-Core platform.

● The app is a website, running on the eNode-Box or other Linux system.

● The app boasts a completed and dedicated Graphic UI.

Maintenance and Support

Community Support: Ebunker is committed to delivering continuous technical support for eNode users, utilizing our Discord channel as a primary platform for assistance and inquiries.

Bugs and Defects: We will proactively engage in the triage, assessment, and resolution of any issues discovered within

eNode, ensuring its smooth operation and reliability.

Adaptation to Lido Changes: Ebunker will accommodate minor updates from Lido that affect eNode with ease. Any significant modifications will be evaluated individually to determine the best course of action for implementation and support.

Funding and Budget

We are seeking funding from Lido to support this initiative, with a proposed budget of 52,000.00 DAI. This funding will enable Ebunker to execute the eNode Lido-SDVTM integration project within the stipulated time frame.

This plan entails an upfront payment of 30% of the total budget, amounting to 15,600 DAI, which will enable the initial phases of the project to commence by covering the foundational expenses and resource allocation. The subsequent disbursement of the remaining 70%, equivalent to 36,400 DAI, will be made upon the successful completion and delivery of the project.