ETHO Protocol White Paper - Updated May 2024

Important Links

- Official website: ethoprotocol.com
- Official email: admin@ethoprotocol.com
- Bitcointalk announcement: Bitcointalk
- Github: ether1project
- Explorers:
    - explorer.ethoprotocol.com
- Web wallet: wallet.ethoprotocol.com
- Node dashboard: nodes.ethoprotocol.com
- Network stats: stats.ethoprotocol.com
- Upload portal: uploads.ethoprotocol.com
- Documentation: docs.ethoprotocol.com

Abstract

ETHO Protocol is an open source, community built project that aims to revolutionize how information is shared and controlled on the internet by fully decentralizing its footprint. This includes:

1. A community stakeholder, node-based governance system.
2. A distributed PoW blockchain base layer with smart contracts.
3. Successive Layer 2 solutions providing services that greatly augment utility, exemplified by the ETHO Protocol decentralized storage network, a global, highly redundant file system.

Imagine a world where all content is completely held in the public domain, 100% immutable, and distributed across a decentralized node network. Envision an on-chain voting system that allows all participants to determine all aspects of the project's governance with complete transparency. The dream of a completely decentralized and democratized internet is now fully achievable through a united community of node operators, community members, and coin holders who are passionate about decentralization.

Disclosure

ETHO Protocol had no ICO or pre-sale, no pre-mining of any coins before the main-net launch. This document outlines our vision and direction for this project and should be read in conjunction with our website and other available media.

Nothing herein constitutes an offer to sell or the solicitation of an offer to buy any tokens. Although this document contains our current vision for the project, this vision will evolve as blockchain technology evolves. All aspects of the project are intended to be decentralized, ensuring no single person or entity controls its direction.

The Problem

Secure data storage and ownership are crucial for individuals and companies, but online censorship and data breaches are increasing, making media platforms unreliable. Free-flowing information and ideas are catalysts for societal evolution and technological growth. However, the current centralized data storage systems pose significant challenges:

1. Data Security: Centralized storage is vulnerable to hacks, data breaches, and unauthorized access, putting sensitive information at risk for both individuals and businesses.
2. Immutability: Data on centralized servers can be altered or deleted, compromising its integrity and trustworthiness.
3. Ownership: Users often lack true ownership and control over their data, as centralized platforms hold the ultimate authority.
4. Censorship: Centralized platforms can censor or remove content at their discretion, limiting individuals' and companies' ability to share and access information freely.

The Solution

ETHO Protocol addresses these issues by leveraging the power of IPFS (InterPlanetary File System) integrated with smart contracts on an EVM (Ethereum Virtual Machine) compatible blockchain to ensure that data is secure, immutable, and censorship-resistant. By utilizing IPFS, data stored on the ETHO network is decentralized, ensuring that no single entity can alter or remove it. This guarantees:

1. Security: Data is distributed across a network of nodes, making it resilient to attacks and unauthorized access.
2. Immutability: Once uploaded, data cannot be altered or deleted, preserving its integrity and trustworthiness.
3. Total Ownership: Users have complete control over their data, with the ability to manage and remove it as they see fit.
4. Censorship Resistance: No single entity has control over the data, preventing any form of censorship and ensuring free access to information.

Additionally, the integration of smart contracts enables automated and trustless interactions, allowing for complex, decentralized applications and services to be built on the ETHO Protocol. This combination of IPFS and smart contracts on an EVM-compatible blockchain provides a robust solution for secure, immutable, and censorship-resistant data storage with true ownership.

This secure and incensorable storage system empowers individuals and companies to share and access information freely, driving forward societal and technological advancements.

Network Functionality

ETHO Protocol is a fully decentralized network, built utilizing a fork of Ethereum, making it fully EVM compatible. Any application or Solidity contract that can be deployed on Ethereum can be deployed

using ETHO Protocol, with the added benefit of decentralized data storage.

The consensus mechanism is Ethash PoW, powered by the native currency (ETHO), which incentivizes public contribution to the consensus mechanism and the deployment and operation of collateralized nodes providing computational and storage resources. Each node contributes to the decentralized storage network and provides security by maintaining the network state via blockchain, receiving rewards for these contributions.

Network Specification

- **Consensus Algorithm:** Ethash/Dagger (Proof-of-Work)
- **Target Block Time:** 13 Seconds
- **Native Smart Contract Language:** Solidity
- **Network ID:** 1313114(0×14095a)
- **Public RPC Server :** rpc.ethoprotocol.com

Economic Policy

The network aims to achieve a perpetual emission of 1 ETHO per block after the first 10 million blocks, resulting in a total circulation of just under 95 million ETHO by block 20 million. Allocating a larger percentage of the block reward to node owners incentivizes network participation and utilization, rewarding them for providing increased value and security to the network.

Etho Protocol Nodes

ETHO Protocol nodes are the backbone of the network, categorized into mining nodes and nodes contributing storage/bandwidth resources. Collateralized nodes maintain blockchain security, manage decentralized data/storage, and give democratized control of the network to participants. Node operators are rewarded with a portion of the block reward and additional rewards for hosting decentralized data/content.

NFT IPFS Storage and Minting

The ETHO Protocol now supports NFT IPFS storage and minting, allowing users to securely store and mint NFTs directly on the ETHO blockchain. This integration ensures that digital assets are decentralized, immutable, and transparently managed. Additionally, NFTs minted on the ETHO blockchain are owned by the blockchain itself and are non-transferable, providing enhanced security and ensuring consistent ownership.

Conclusion

ETHO Protocol addresses the complex issue of online censorship by leveraging a strong team, advanced technologies, and public consensus. This project aims to revolutionize data storage and access, fundamentally changing how data can and will be used. Special thanks to all community members for helping us achieve our shared vision.

Social Media

- Twitter: @ethoprotocol
- Discord: ethoprotocol
- Medium: ethoprotocol
- YouTube: EthoProtocol
- Reddit: r/ethoprotocol