Cross chain proofs of Ownership: A Game-Changer for DeFi and Privacy

Abstract

The Cross Ring Protocol emerges in the dynamic realm of blockchain technology, aiming to establish new standards in privacy and cross-chain interoperability. This innovative solution enables users to prove ownership of cryptocurrencies like Bitcoin (BTC), Ethereum (ETH), MATIC, AVAX, and XRP across multiple chains. Hosted on IPFS with Chainlink APIs and a unique ring signatures library, Alice's Ring, it guarantees secure and private ownership proofs. This protocol facilitates user participation in the Ethereum, Polygon, and Avalanche ecosystems, reshaping DeFi loans, credit scoring, and underwriting, marking a significant advancement in blockchain-based financial applications.

1 Introduction and Challenges

In the evolving landscape of blockchain technology, enhancing privacy, security, and cross-chain interoperability is vital. The Cross Ring Protocol addresses the challenge of proving asset ownership across various blockchains while maintaining privacy. Current methods often compromise user anonymity, posing risks to privacy and data integrity. Our solution enables seamless proof of asset ownership, integrating technologies like IPFS, Chainlink APIs, and ring signatures, revolutionizing DeFi and cross-chain financial products.

2 Solution and Applications

The solution leverages a comprehensive technology stack:

- IPFS for decentralized hosting.
- Chainlink APIs for data integration.
- Ring signatures, Alice's ring by Cypher Lab, for confidential ownership proofs.

Key applications include:

- Cross-chain collateralization in DeFi loans.

- Privacy in credit scoring and underwriting.
- Participation in Ethereum-based financial instruments.
- Transparent yet private proof of reserves for exchanges.
- Privacy-preserving wealth management and atomic swaps.

3 Security and Privacy

The project emphasizes strong security and privacy measures, including encryption, secure communication, and identity protection. It ensures user anonymity in cross-chain interactions and is designed to be scalable and resilient against potential security threats.

4 Conclusion

The Cross Ring Protocol is set to transform the blockchain landscape by enabling secure, private cross-chain interactions. It opens new possibilities in DeFi and privacy applications, backed by a robust technical framework.

5 Team

The project team, comprising Maxime, Thomas, Nathan, and Adam, brings diverse expertise and a shared commitment to enhancing the blockchain and WEB3 community.