

Abstract

This whitepaper presents Unibridge, an innovative cross-chain intent-based framework that enables seamless asset swaps, where \$UNIB token holders play pivotal roles as executors and verifiers of user-defined intents. By allowing users to specify outcomes without managing execution complexities, Unibridge enhances usability, security, and community participation in decentralized finance (DeFi).

1. Introduction

Blockchain technology demands greater accessibility and streamlined transaction workflows. Current decentralized finance (DeFi) models often necessitate intricate details for every action, which introduces complexity and potential for error. The intent-based architecture of Unibridge addresses these challenges, enabling users to declare their goals while delegating execution specifics to the protocol.

1.1 Problem Statement

Existing DeFi platforms frequently burden users with technical details that can lead to:

- User frustration from complex transaction processes.
- Heightened vulnerability to malicious exploitation.
- Limited accessibility for non-technical users.

1.2 Solution Overview

Unibridge's decentralized framework allows users to express desired outcomes or intents without the need to specify procedural details. \$UNIB token holders, serving as executors and verifiers, will facilitate intent execution, creating a secure and intuitive user experience.

2. Intent-Based Architecture

2.1 Definition of Intents

In this model, an intent is the user's desired outcome in a blockchain interaction, shifting the focus from detailed actions to end goals.

• Example Intent: "I want to swap 1 ETH for USDC."

2.2 Types of Intents

Unibridge defines intents in two categories:

- Abstract Intents: High-level expressions of goals without specific parameters (e.g., "I want to stake USDC").
- Executable Intents: Fully defined intents with all necessary parameters for immediate execution (e.g., "Stake 100 USDC from my Polygon wallet on Ethereum").

3. Framework Components

3.1 User Interface (UI)

A streamlined UI enables users to declare intents without technical input, simplifying engagement for all users.

3.2 Intent Solvers

\$UNIB token holders act as Intent Solvers, executing intents based on specified criteria. Solvers are incentivized via rewards for successful executions.

3.3 Verification Mechanism

A robust verification layer ensures that each intent undergoes validation before execution, reinforcing trust and security.

3.4 Governance Participation

\$UNIB holders can influence protocol updates and operational decisions, ensuring Unibridge remains community-driven and adaptable.

4. \$UNIB Tokenomics

4.1 Utility of the \$UNIB Token

The \$UNIB token powers the Unibridge ecosystem by:

- Granting execution rights, with holders earning rewards for fulfilling intents.
- Providing verification rewards, encouraging diligence and community oversight.
- Allowing participation in governance decisions for a decentralized and responsive protocol.

4.2 Staking Mechanism

A staking feature will enable \$UNIB holders to earn rewards and enhance governance influence, promoting both engagement and network security.

4.3 Fee Structure

Transaction fees payable in \$UNIB generate consistent token demand tied to platform usage, aligning token value with ecosystem activity.

5. Security Considerations

Unibridge's intent-based architecture addresses security by:

- Reducing exposure to complex transaction mechanics for users.
- Embedding verification steps pre-execution.
- Encouraging active community oversight via \$UNIB holder participation.

6. Roadmap

- Phase 1: Development
 - Develop and test the intent-based architecture and UI for user-friendly intent declaration.
- Phase 2: Community Engagement
 - Onboard \$UNIB holders as Intent Solvers and Verifiers.
 - Establish governance frameworks for community-driven enhancements.
- Phase 3: Expansion
 - Integrate cross-chain functionality with multiple networks.
 - Form partnerships with DeFi projects to foster ecosystem interoperability.

7. Conclusion

Unibridge redefines cross-chain transactions by leveraging intent-based swaps where \$UNIB token holders drive execution and verification. This model not only simplifies user interactions but also strengthens community engagement and protocol security. Unibridge aims to establish a vibrant, user-centric ecosystem that enhances both accessibility and security across the DeFi landscape.