

Summary

With the support of the Avalanche Foundation and BNB Chain LayerZero has successfully facilitated the bridging of wstETH as a native token between Ethereum, Avalanche and BNB.

This implementation will provide users with a seamless experience for bridging between these chains, including horizontal composability across L2s, prevents the fragmentation of wstETH, and grants full ownership of all relevant contracts to the Lido DAO.

Upon receipt of support from the Lido DAO, LayerZero will transfer ownership of the wstETH contracts to the DAO.

Overview

The Lido DAO has expressed interest in achieving seamless omnichain interoperability for stTokens.

As LSTs continue to assert their dominance in the DeFi space across multiple chains, Lido is presented with multiple opportunities to expand into new ecosystems, significantly increasing Total Value Locked (TVL) and the usage of wstETH.

The demand for wstETH on chains where it's currently scarce is notably high. Three chains, namely Avalanche and BNB Chain have expressed strong desire to facilitate seamless and unfragmented bridging of LSTs, including wstETH, through LayerZero.

By utilizing LayerZero, these chains have achieved horizontal composability for wstETH, offering instant transfers of wstETH between L2s and Ethereum. This unlock will substantially improve the user experience for those utilizing wstETH across L2s and L1s and will facilitate the widespread adoption of wstETH in numerous thriving ecosystems.

Native wstETH on Avalanche and BNB promotes further growth of their respective LSTfi ecosystems. Protocols comprising the majority of TVL and volume of these chains including Trader Joe, Poolside, Pancakeswap, Venus, and Stargate are also launch partners for this initiative.

Additional Support

In a recent [proposal](#), Hasu expressed concern around competition from wallets, exchanges and institutions who may ring-fence Lido from institutional staking, in turn resulting in a less Ethereum-aligned protocol taking over the LST ecosystem.

If the deployed version of wstETH is supported by the Lido DAO as canonical, LayerZero Labs would provide significant ongoing support to the Lido DAO and the relevant DAO working groups by utilising our extensive institutional network including but not limited to protocol investors: Franklin Templeton, PayPal Ventures, and BPEA to enable relationship building and integrations between the Lido DAO and top relevant institutions.

Furthermore, we are working with key protocols across Avalanche and BNB to ensure there is deep liquidity for wstETH from the get go.

Technical Specification

This implementation is modelled after the specification of wstETH bridged into Cosmos and criteria articulated by the Lido core team.

The [OFT](#) (Omnichain Fungible Token) standard capitalizes on LayerZero's generic messaging primitive, enabling applications deployed across multiple chains to seamlessly transfer token balances to each other in a trustless manner. Tokens that have already been deployed can easily integrate this standard through a straightforward ProxyOFT contract, without the need to bridge or wrap tokens through intermediate chains. Instead, balances are directly modified via messages transmitted from the source to the destination chain. This innovative solution promotes horizontal composability between Ethereum, BNB, and Avalanche providing the Lido DAO with maximum control and unified liquidity.

OFT is designed to enable contract owners – ex. Lido DAO – to configure their security and mint/burn privileges at their own discretion. LayerZero Labs never maintains the ability to mint/burn tokens and other bridges and messaging protocols may be integrated at any time, simply a configuration set forth by a successful on-chain governance vote.

Some notable examples of omnichain fungible-tokens that are currently live and in production include \$MIM, \$agEUR, \$scrUSD, \$CRV, \$BTC.b, \$CAKE, \$JOE and \$AURA.

LSDeFi project tokens such as \$swETH, \$eUSD, \$unshETH, \$mevETH, \$STONE, and \$mkUSD have all integrated with LayerZero following a similar specification.

For more detailed information regarding LayerZero's generic messaging architecture and the implementation, please consult the [provided documentation](#) in the appendix.

We are excited to delve into the technical implementation of our solution with the relevant Lido core working groups and

appreciate the time and feedback of the Lido core team in the development of this implementation.

Token Addresses:

BNB: 0x2Bbbdf97295F73175b12CC087cF446765931e1C3

Avalanche: 0x2Bbbdf97295F73175b12CC087cF446765931e1C3

Security

LayerZero has consistently operated with the principle that security is the highest priority. In the last two years, LayerZero Labs:

- Built and launched LayerZero, the leading omnichain interoperability protocol and the first messaging protocol to enable full modular security with access to zkLightClient technology at-scale
- Created [Pre-Crime](#) in response to security failures at major cross-chain protocols, a proprietary security advancement ensuring application-defined invariants are checked before the delivery of each message.
- Commissioned \$10m+ total audits from top auditors including Quantstamp, Zellic, Ottersec and Trail of Bits. LayerZero Labs is one of the highest spenders of security audits across all protocols in the ecosystem (see Audits below).
- Launched crypto's largest bug bounty - [a \\$15 million bounty](#) in collaboration with ImmuneFi.
- LayerZero remains the only messaging protocol at-scale (80M+ messages delivered) to never experience an exploit.

Appendix

[Important links](#) (Audits, developer docs, and contract addresses)

Note: This post has been updated to reflect the changes made based on robust engagement with the DAO. Summary of these changes are discussed in the reply below.