

# Introduction

KyberSwap proposes the deployment of wstETH (Wrapped staked ETH) to Base, with the ultimate goal of acceptance of ownership of the wstETH bridging components by the Lido DAO.

## 1. Base's Rapid Growth and Ecosystem:

wstETH has already been deployed to Optimism and Arbitrum, two of the biggest L2s. Since the launch of Base L2 in August, it has exhibited impressive growth, fostering a strong and vibrant community. Within two months, Base has continuously ranked top 3 among all L2s in terms of total value assets; and ranked in the top 10 among all blockchain networks across various metrics such as the number of protocols, total TVL for all tokens, TVL for stablecoins, and daily trading volume.

Reference: [DeFiLlama Rankings](#) | [L2Beat Rankings](#)

## 2. High Demand for wstETH:

Lido (w)stETH has established itself as the [7th most valuable cryptocurrency by market capitalization](#). Therefore, major ecosystems such as Base have significant demand for wstETH as it opens up opportunities for users to utilize their stETH holdings in various DeFi protocols. Notably, projects like KyberSwap have actively hosted wstETH liquidity across multiple L2 networks, and would like to expand this support for wstETH adoption to Base as well.

## 3. Canonical Bridge for wstETH:

The best approach for deploying wstETH on Base is through the use of the canonical bridge.

The Beefy team has taken initiative to deploy wstETH to Base using the same open-source solution used for the Optimism deployment ([GitHub - lidofinance/lido-l2](#)). Importantly, the management of the wstETH bridging components is designed to be performed by the Lido DAO ([GitHub - lidofinance/governance-crosschain-bridges](#); [This repo contains the crosschain governance bridges used for the aave markets deployed across different networks](#)). Therefore, we propose that the Lido DAO formally accept ownership of the wstETH bridging components mentioned through a signaling snapshot vote.

# Conclusion

The deployment of wstETH on the Base blockchain by the Beefy team and the subsequent ownership acceptance of the bridging components by Lido DAO both represent significant steps toward enhancing the DeFi ecosystem within Base and the continued adoption of wstETH. The rapid growth and high potential of Base and the strong demand for wstETH both underscore the importance of this initiative.

# Audits

- Governance crosschain bridges (OptimismBridgeExecutor): <https://github.com/lidofinance/audits/blob/main/Oxorio%20Governance%20Crosschain%20Bridges%20Smart%20Contracts%20Security%20Audit%20Report%2008-2022.pdf>
- wstETH token bridge (L1ERC20TokenBridge, ERC20Bridged, L2ERC20TokenBridge): <https://github.com/lidofinance/audits/blob/main/Oxorio%20Lido%20L2%20Smart%20Contracts%20Security%20Audit%20Report%2007-2022.pdf>

# Deployment artifacts and levers setup:

## Deployments on Mainnet (L1) and Base (L2):

- OptimismBridgeExecutor on L2: [0x0E37599436974a25dDeEdF795C848d30Af46eaCF

](<https://basescan.org/address/0x0E37599436974a25dDeEdF795C848d30Af46eaCF#code>)(Mainnet to Base decisions forwarder for the Lido DAO Agent)

- L1ERC20TokenBridge on L1: [0x9de443AdC5A411E83F1878Ef24C3F52C61571e72

](<https://etherscan.io/address/0x9de443AdC5A411E83F1878Ef24C3F52C61571e72>)(Mainnet token bridge part for wstETH)

- ERC20Bridged on L2: [0xc1CBa3fCea344f92D9239c08C0568f6F2F0ee452

](<https://basescan.org/address/0xc1CBa3fCea344f92D9239c08C0568f6F2F0ee452>)(Base representation for wstETH proposed as the canonical one)

- L2ERC20TokenBridge on L2: [0xac9D11cD4D7eF6e54F14643a393F68Ca014287AB

](<https://basescan.org/address/0xac9D11cD4D7eF6e54F14643a393F68Ca014287AB>)(Base token bridge part for wstETH)

## Levers setup:

- OptimismBridgeExecutor
- [getEthereumBridgeExecutor](#) is the [Lido DAO Agent](#) (admin)
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- Ultimate admin and role holder on L1 is the [Lido DAO Agent](#)
- Proxy admin for L1ERC20TokenBridge
- DEFAULT\_ADMIN\_ROLE for L1ERC20TokenBridge
- WITHDRAWALS\_DISABLE\_ROLE for L1ERC20TokenBridge
- WITHDRAWALS\_ENABLE\_ROLE for L1ERC20TokenBridge
- DEPOSITS\_DISABLE\_ROLE for L1ERC20TokenBridge
- DEPOSITS\_ENABLE\_ROLE for L1ERC20TokenBridge
- Proxy admin for L1ERC20TokenBridge
- DEFAULT\_ADMIN\_ROLE for L1ERC20TokenBridge
- WITHDRAWALS\_DISABLE\_ROLE for L1ERC20TokenBridge
- WITHDRAWALS\_ENABLE\_ROLE for L1ERC20TokenBridge

- DEPOSITS\_DISABLE\_ROLE for L1ERC20TokenBridge
- DEPOSITS\_ENABLE\_ROLE for L1ERC20TokenBridge
- Ultimate admin and role holder on L2 is the [OptimismBridgeExecutor](#)
- Proxies admin for ERC20Bridged, L2ERC20TokenBridge
- DEFAULT\_ADMIN\_ROLE for L2ERC20TokenBridge
- WITHDRAWALS\_DISABLE\_ROLE for L2ERC20TokenBridge
- WITHDRAWALS\_ENABLE\_ROLE for L2ERC20TokenBridge
- DEPOSITS\_DISABLE\_ROLE for L2ERC20TokenBridge
- DEPOSITS\_ENABLE\_ROLE for L2ERC20TokenBridge
- Proxies admin for ERC20Bridged, L2ERC20TokenBridge
- DEFAULT\_ADMIN\_ROLE for L2ERC20TokenBridge
- WITHDRAWALS\_DISABLE\_ROLE for L2ERC20TokenBridge
- WITHDRAWALS\_ENABLE\_ROLE for L2ERC20TokenBridge
- DEPOSITS\_DISABLE\_ROLE for L2ERC20TokenBridge
- DEPOSITS\_ENABLE\_ROLE for L2ERC20TokenBridge
- Emergency breaks msg on L1 is the already established one [0x73b047fe6337183A454c5217241D780a932777bD](#)):
- WITHDRAWALS\_DISABLE\_ROLE for L1ERC20TokenBridge
- DEPOSITS\_DISABLE\_ROLE for L1ERC20TokenBridge
- WITHDRAWALS\_DISABLE\_ROLE for L1ERC20TokenBridge
- DEPOSITS\_DISABLE\_ROLE for L1ERC20TokenBridge
- Emergency breaks msg on L2 is a newly created one [0x0F9A0e7071B7B21bc7a8514DA2cd251bc1FF0725](#)) with the same EOA members as for L1:
- WITHDRAWALS\_DISABLE\_ROLE for L2ERC20TokenBridge
- DEPOSITS\_DISABLE\_ROLE for L2ERC20TokenBridge
- WITHDRAWALS\_DISABLE\_ROLE for L2ERC20TokenBridge
- DEPOSITS\_DISABLE\_ROLE for L2ERC20TokenBridge