Proposal: Add support for wstETH on Polygon v3

Back once again for the renegade master…

References:

Project: https://lido.fi/

Whitepaper: lido-dao/README.md at master · lidofinance/lido-dao · GitHub

Github: GitHub - lidofinance/polygon-contracts

Documentation: https://docs.lido.fi/

Audit: polygon-contracts/audits/v2 at main · lidofinance/polygon-contracts · GitHub

wstETH: Wrapped liquid staked Ether 2.0 (PoS) (wstETH) Token Tracker | PolygonScan

Chainlink: EACAggregatorProxy | Address 0x10f964234cae09cB6a9854B56FF7D4F38Cda5E6a | PolygonScan

Governance: https://research.lido.fi/

Twitter: https://twitter.com/LidoFinance

Discord: Lido

Summary:

This ARFC presents the community with the opportunity to add wstETH to the Polygon v3 Liquidity Pool.

Motivation

The stETH Reserve on Aave v2 is the largest Reserve across all Aave deployments with $1.52B in deposits, exceeding USDC ($0.99B) and ETH ($1.16B). On Aave v3, the most recent Aave deployment, wstETH provides $130M or 29% of markets TVL.

Several communities building on Aave utilize the wstETH/wETH rewards-maximizing strategy to generate rewards on various assets. By adding wstETH to the Polygon v3 market, users gain access to a third Liquid Staking Token (LST) source of rewards.

The demand for wETH on Aave has increased as a result of listing stETH on Aave v2. This led to a material increase in Aave's wETH nominated revenue stream. Listing wstETH across various Aave deployments, has enabled Aave to offer the higher APR on wETH deposits, across major lending markets, continually outperforming Compound.

By listing wstETH on Polygon, the Aave community is helping create an environment capable of replicating a similar outcome to that of the Ethereum Aave v2 and v3 Liquidity Pool.

The utilization of wETH on Polygon is 10.07%, compared to 48.37% on the Ethereum v2 wETH Reserve. Listing wstETH on Polygon v3 will increase TVL for Aave and generate new demand for wETH borrowing, creating demand for wETH deposits and driving growth for Aave.

Specification

1. What is the link between the author of the AIP and the Asset?

Jbeezy is a full-time contributor to the Lido DAO.

1. Provide a brief high-level overview of the project and the token?

Lido is the name given to a suite of liquid staking smart contract systems deployed across multiple blockchain network platforms. The smart contract systems are software middleware that extend the functionality of the networks by enabling more participants to stake the network native token.

The Lido on Ethereum software is deployed on the Ethereum network. When participants use it to route their stake, they enhance the security of the Ethereum network by increasing the number of participants who stake ETH.

Lido on Ethereum does not record the wallet address of participants that use it. Instead participants use the middleware to mint a rebasing stETH utility token to themselves when they route their stake. The utility tokens are fungible and liquid. The total balance of stETH in existence is based on the total amount of ETH staked via the Lido on Ethereum middleware plus total staking rewards minus any slashing applied on validators. stETH rebases daily.

Due to the rebasing nature of stETH, a user's stETH balance changes daily as staking rewards are reported from the

consensus layer. As some DeFi protocols require a constant balance mechanism for tokens, stETH can be wrapped into wstETH which keeps a user's token balance fixed and uses deterministic code to account for users' staking reward balances.

Example of an unwrapping scenario:

1. User wraps 1 stETH and gets 0.9803 wstETH (1 stETH = 0.9803 wstETH)
2. A rebase happens, the wstETH price goes up by 5%
3. User unwraps 0.9803 wstETH and gets 1.0499 stETH (1 stETH = 0.9337 wstETH)

When withdrawals are enabled on the Ethereum network, by the Ethereum Foundation, wstETH user's can unwrap the tokens to stETH and then burn the tokens to use the withdrawal functionality of middleware and get their stake and accumulated rewards.

wstETH on Polygon: 0x03b54A6e9a984069379fae1a4fC4dBAE93B3bCCD

1. Explain positioning of the token in the AAVE ecosystem. Why would it be a good borrow or collateral asset?

The below shows the effect that listing of stETH has had on the Aave v2 Ethereum Mainnet deployment. stETH drives most of the wETH borrowing demand and the resulting fee-revenue.

The wETH reserve generated approximately $279k in revenue during January, $244k during February and has already generated $234k by mid March 2023.

1. Provide a brief history of the project and the different components: DAO (is it live?), products (are they live?). How did it overcome some of the challenges it faced?

The below provides a brief overview and some key dates of interest providing insight into the history to stETH and wstETH:

- stETH deployed on 17th December 2020
- stETH listed on Aave v2 on the 27th February 2022
- wstETH deployed 5th August 2022
- wstETH listed on Ethereum v3 27th January 2023
- wstETH listed on Optimism v3 24th February 2023
- wstETH listed on Arbitrum v3 1st March 2023

Lido Protocol stETH is considered the most dominant staked ETH utility token across the industry. stETH tokens make up 31.4% of all staked ETH deposits.

1. How is wstETH currently used?

Aave v2 on Ethereum is the largest holder of stETH.

Deploying wstETH on Polygon, along with on other networks like Optimism and Arbitrum, will make the token available to Aave users on Layer 2 networks in the same way stETH is available on Ethereum Mainnet. It will also enable DeFi protocols to build interesting and exciting new use cases by utilizing integration with Aave to access the wstETH market.

InstaDapp, Index Coop, Galleon DAO, CIAN and others have all built products on top of Aave utilizing the recursive stETH/ETH strategy. By adding wstETH to the Polygon Liquidity Pool, Aave moves closer towards enabling developers to deploy similar products on Polygon.

On Polygon, wstETH is mostly used for providing liquidity on Balancer. In time, this pool will be migrated to wstETH / bb-a-wETH and a gauge will be created to distribute rewards to Liquidity Providers who stake their BPTs.

1. Emission schedule

There is no emission schedule.

1. Token (& Protocol) permissions (minting) and upgradability. Is there a multisig? What can it do? Who are the signers?

For details on stETH, which is already listed on Aave v2 Ethereum, Arbitrum and Optimism please refer to the following forum posts:

- ARC: Add support for stETH (Lido)
- [ARC] Add support for wstETH on Arbitrum Aave V3

- [ARC] Add wstETH to Aave v3 on Optimism

Transferring wstETH from Ethereum to Polygon occurs via the Polygoncanonical bridge provided by the Polygon Foundation.

1. Market data (Market Cap, 24h Volume, Volatility, Exchanges, Maturity)
2. Market capitalisation: $8,582,392,956
3. 24H Volume ~$50M (stETH + wstETH)

Decentralized exchange liquidity pools

Balancer

- wstETH/WETH - 0x65Fe9314bE50890Fb01457be076fAFD05Ff32B9A

Kyber Network

- wstETH/wETH - 0xab08b0c9dadc343d3795dae5973925c3b6e39977
- Social channels data (Size of communities, activity on Github)
- Discord: 43,575 members
- Twitter: 131.2k followers
- Github: 231 followers
- Contracts date of deployments, number of transactions, number of holders for tokens

The below applies to just wstETH on Arbitrum:

- Date of Deployment: Aug-25-2022
- Number of Transactions: 259
- Number of holders for token: 14 (liquidity pools are recorded as 1 address)