

title: [ARFC] Optimism Create ETH E-Mode

shortDescription: Create an ETH nominated E-Mode on Aave Optimism v3.

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Summary

This publication proposes creating an ETH nominated E-Mode on the Aave Optimism v3 deployment.

Abstract

Creation of an E-Mode on Aave Optimism v3 will grant users the ability to enter yield maximising strategies with greater capital efficient.

With the introduction of an ETH E-Mode, Aave Protocol is expected to experience greater borrowing demand for wETH, leading to enhanced revenue generation.

Motivation

Upon reviewing how several of the largest wallets holding aoptwstETH are interacting with Aave Protocol, there is a clear demand for yield generation by borrowing wETH and acquiring more wstETH to loop.

The below shows how the largest variableDebtOptwETH holder is interacting with Aave Protocol. Deposit wstETH and borrow wETH. This users generates 23.90% of the wETH debt, 23.90% of the wETH revenue for Aave DAO on Optimism.

Creating an ETH E-Mode, will enable this user to borrow more wETH and also entice other users to enter into similar strategies.

Checking on-chain liquidity, a 4,950 wstETH to wETH swap incurs 0.91%, this will enable the strategies to deleverage whilst giving back minimal yield. The wETH to wstETH swaps, increasing leverage, incur more price impact than deleveraging swaps. This will increase the pay back period of the strategy which is beyond Aave's control.

It is worth noting that the near 1% price impact swap lot size is considerably larger than existing users of Aave Optimism v3. However, this is more applicable to structured products which pool deposit capital leading to larger swap sizes.

Oracle

There are several Chainlink oracle available:

- Exchange Rate wstETH/stETH: [optimism: 0xe59EBa0D492cA53C6f46015EEa00517F2707dc77]

](<https://optimistic.etherscan.io/address/0xe59EBa0D492cA53C6f46015EEa00517F2707dc77>)

- wstETH/USD: [optimism: 0x698B585CbC4407e2D54aa898B2600B53C68958f7]

](<https://optimistic.etherscan.io/address/0x698B585CbC4407e2D54aa898B2600B53C68958f7>) * Deployed: [2023.02.03](#)

- Deployed: [2023.02.03](#)

- wstETH/ETH: [optimism: 0x524299Ab0987a7c4B3c8022a35669DdcdC715a10]

](<https://optimistic.etherscan.io/address/0x524299Ab0987a7c4B3c8022a35669DdcdC715a10>) * Deployed: [2023-04-23](#)

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- stETH/USD: [optimism: 0x41878779a388585509657CE5Fb95a80050502186]

](<https://optimistic.etherscan.io/tx/0x41878779a388585509657CE5Fb95a80050502186>)

The wstETH oracle on Optimism draws upon the price of stETH across several networks. This means the oracle is subject to what wstETH is trading at on other networks. This acts to de-risk the Optimism E-Mode as the wstETH price is not as exposed to the wstETH/ETH price on Optimism as it otherwise could have been.

Creation of the E-Mode will enable the wstETH price on Optimism to be arbitrated against the wsETH oracle price which is

expected to lead to a tighter price correlation with wstETH true value. Such strategies are potential yield sources for more sophisticated users.

Something to consider is the stETH & wstETH yield is updated every 24 hours. This affects the exchange rate wstETH/stETH. The stETH oracle is also spot market based and not calculated. This created [caution](#) when the original proposal to add wstETH as collateral with ETH E-Mode was proposed.

Since the original [Add wstETH to Aave Optimism v3](#) proposal, the wstETH/USD and wstETH/ETH oracles have been published. The later is most applicable to the ETH E-Mode category. There is sufficient permutations of oracles to facilitate using either [BGD and/or Gauntlet + Chainlink](#) price synchronised adapters. The most optimal oracle solution will be used at time of deployment with input from risk providers and [@bgdlabs](#).

Specification

The following risk parameters have been proposed by Llama.

Ticker: wstETH

Contract: [optimism:0x1F32b1c2345538c0c6f582fCB022739c4A194Ebb

](<https://optimistic.etherscan.io/token/0x1f32b1c2345538c0c6f582fcb022739c4a194ebb>)

Ticker: wETH

Contract: [optimism:0x420000000000000000000000000000000000000006

](<https://optimistic.etherscan.io/address/0x420000000000000000000000000000000000000006>)

Parameter

Value

Category

1 (ETH Correlated)

Assets

wstETH, wETH

Loan to Value

90.00%

Liquidation Threshold

93.00%

Liquidation Bonus

1.00%

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