POST /v1/shortcuts/bundle

Request

Query Parameters:

Query Param Description Example fromAddress Ethereum address of the wallet to send the transaction from (It could be an EoA, or a Smart Wallet) fromAddress=0x6b175474e8909... chainId (Optional) The chainId of the network. Default value is 1 for Mainnet chainId=1

Body:

An array of objects (specific actions) with the following structure:

[{ "protocol" :

"" ,

// protocol name (e.g. "yearn") "action" :

"" ,

// action name (e.g. "deposit") "args" : {} // Arguments of the action }]

Enso Bundler

Enso Bundler offer developers a versatile approach to interacting with DeFi protocols through three primary tools: the Enso Router, the Arbitrary Contract Calls and the protocols Actions.

Enso Router

Designed to simplify the process of executing transactions across various DeFi protocols, the Enso Router abstracts complex protocol interactions into a user-friendly interface. This allows developers to efficiently route transactions, swap tokens, and manage liquidity across multiple platforms with minimal effort.Example: \

[{ "protocol" :

"enso" , "action" :

"route" , "args" : { "tokenIn" :

"0xeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeee" , "tokenOut" :

"0xae7ab96520DE3A18E5e111B5EaAb095312D7fE84" , "amountIn" :

"100000000000" , "slippage" :

"300" } }]

Contract Calls

For those seeking granular control over their DeFi interactions, Thecall action is a powerful tool to execute custom logic directly on the blockchain. This feature empowers developers to craft tailored transactions, interact with smart contracts beyond the predefined Enso Router pathways, and implement unique strategies that align with their specific objectives. The usage is very similar to the route endpoint (which uses under the hood the same functionalities), and it's as simpler as Token A -> Token B where both can be base tokens or vaults, lps and so on. Example:

After routing to a specific token, transfer the swapped amount to a specific address

[{ "protocol" :

"enso" , "action" :

"route" , "args" : { "tokenIn" :

"0xeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeee" , "tokenOut" :

"0xae7ab96520DE3A18E5e111B5EaAb095312D7fE84" , "amountIn" :

"100000000000" , "slippage" :

"300" } } , { "protocol" :

"enso" , "action" :

"call" , "args" : { "address" :

"0xCc9EE9483f662091a1de4795249E24aC0aC2630f" , "method" :

"transfer" , "abi" :

"function transfer(address,uint256) external" , "args" : ["0x93621DCA56fE26Cdee86e4F6B18E116e9758Ff11" , {
"useOutputOfCallAt" :

1 }] } }]

Protocol-specific actions

Pre-made, protocol-specific actions that can be combined into a single transaction. These are protocol interactions
abstracted by Enso. They include deposit/withdraw actions on specific protocols, borrow actions, or swaps on specific
AMMs.

You can find the list of all available protocols here.

Args and utils:

Args

Arguments are action specific and you can find them in theActions section. A simple example for the route actions can be:

{ "tokenIn" :

"0xeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeee" ,

// ETH "tokenOut" :

"0xae7ab96520de3a18e5e111b5eaab095312d7fe84" ,

// stETH "amountIn" :

10000000000 }

Utils: use previous outputs

One of the most powerful features of the bundle endpoint is the possibility to use the output of a previous action as an input
for the next one. Generally, the output of an action is an amount of tokens. But in the future we will support more complex
outputs.

{ "tokenIn" :

"0xeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeee" ,

// ETH "tokenOut" :

"0xae7ab96520de3a18e5e111b5eaab095312d7fe84" ,

// stETH "amountIn" : { useOutputOfCallAt :

0 } } The following section will show a complete example of a bundle request, with multiple actions and the use of the output
of a previous action as an input for the next one.

Examples

Route from ETH to stETH, deposit stETH on Aave, and transfer the aToken to a specific address.

curl

-X

POST \ -H

'Content-Type: application/json' \ -H

'Authorization: Bearer 1e02632d-6feb-4a75-a157-documentation' \ -d

'[{ "protocol": "enso", "action": "route", "args": { "tokenIn": "0xeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeee", "tokenOut": "0xae7ab96520DE3A18E5e111B5EaAb095312D7fE84", "amountIn": "100000000000", "slippage": "300" } }, { "protocol": "aave-v3", "action": "deposit", "args": { "primaryAddress": "0x87870Bca3F3fD6335C3F4ce8392D69350B4fA4E2", "tokenIn": "0xae7ab96520DE3A18E5e111B5EaAb095312D7fE84", "tokenOut": "0xCc9EE9483f662091a1de4795249E24aC0aC2630f", "amountIn": { "useOutputOfCallAt": 0 } } }, { "protocol": "enso", "action": "call", "args": { "address": "0xCc9EE9483f662091a1de4795249E24aC0aC2630f", "method": "transfer", "abi": "function transfer(address,uint256) external", "args": ["0x93621DCA56fE26Cdee86e4F6B18E116e9758Ff11", { "useOutputOfCallAt": 1 }] } }]' \ 'https://api.enso.finance/api/v1/shortcuts/bundle?chainId=1&fromAddress=0xd8dA6BF26964aF9D7eEd9e03E53415D37aA96045'

[Overview](#) [Actions](#)