

Build with 0x API

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Agenda

Overview of 0x

How does 0x work?

0x API

Resources

Questions?



Overview of 0x



0x's Mission

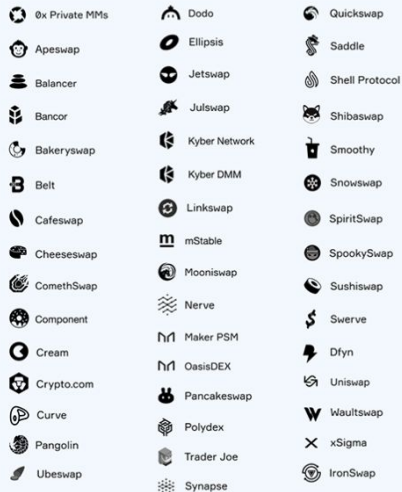
Create a tokenized world where all value can flow freely

More Accessible, More Liquid, Creation of New Markets

0x Ecosystem

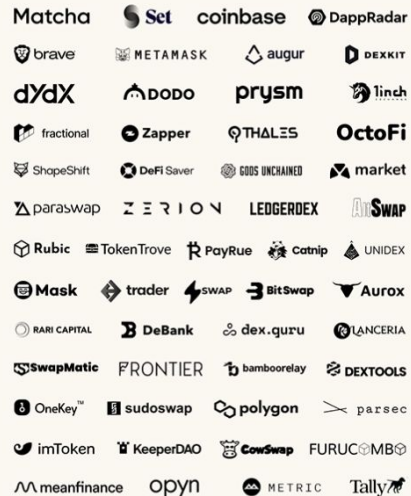


Makers



Supply

Takers



Demand



AVALANCHE



BINANCE
SMART CHAIN



celo



ethereum



OPTIMISM



fantom

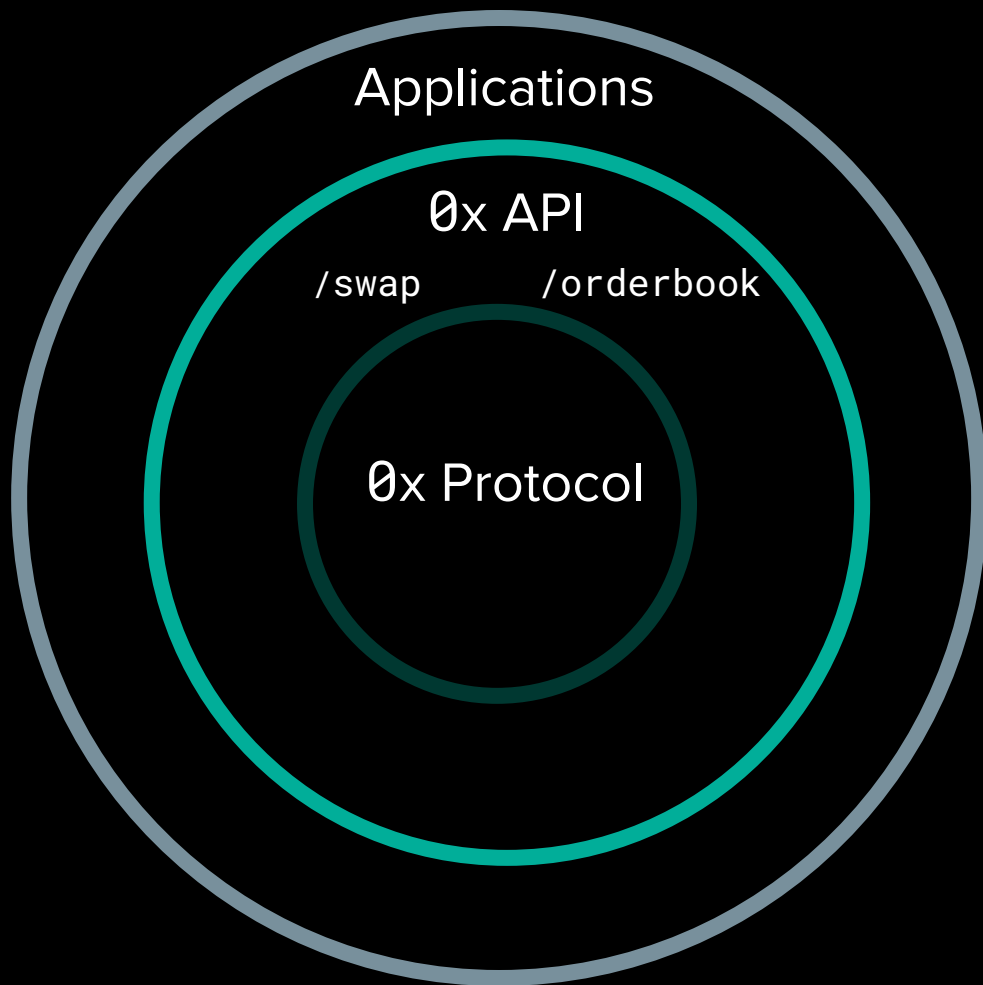


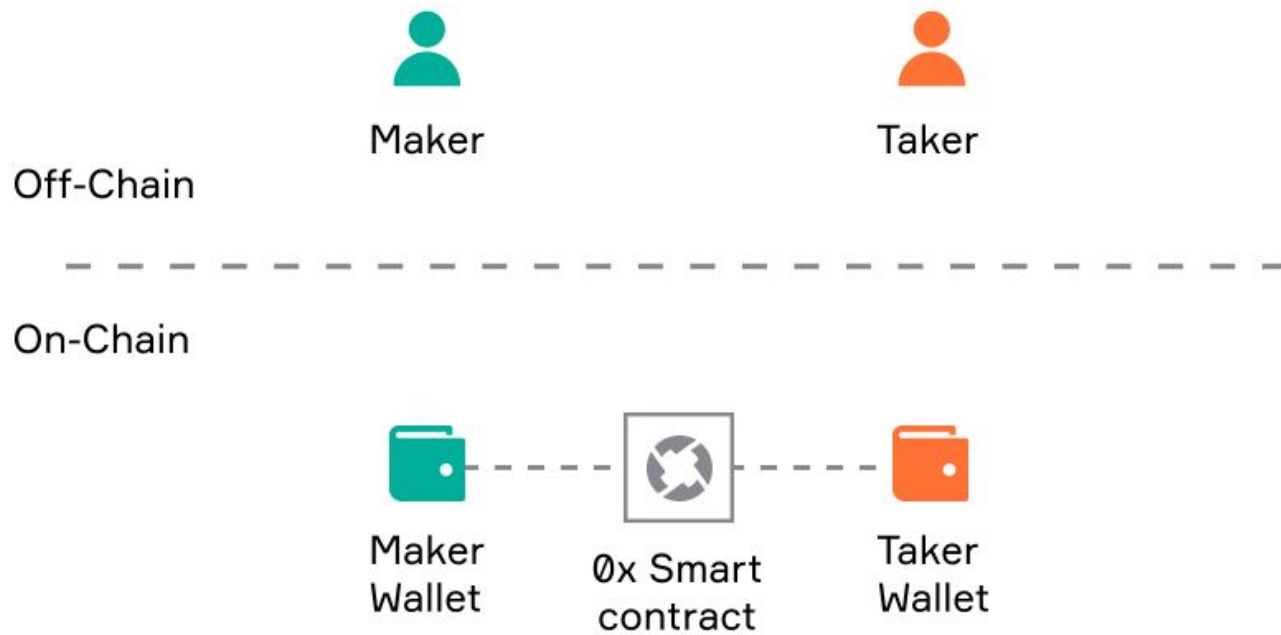
polygon

Supported blockchains

0x Ecosystem - January 13, 2022

How does 0x work?



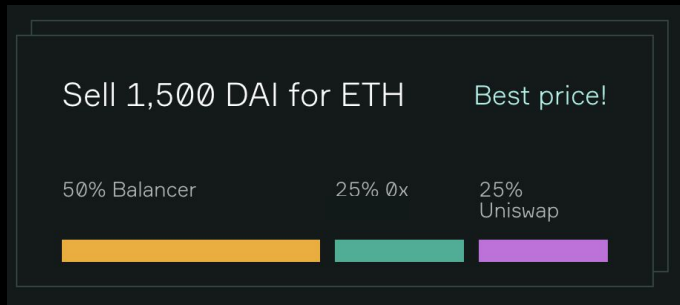


0x API

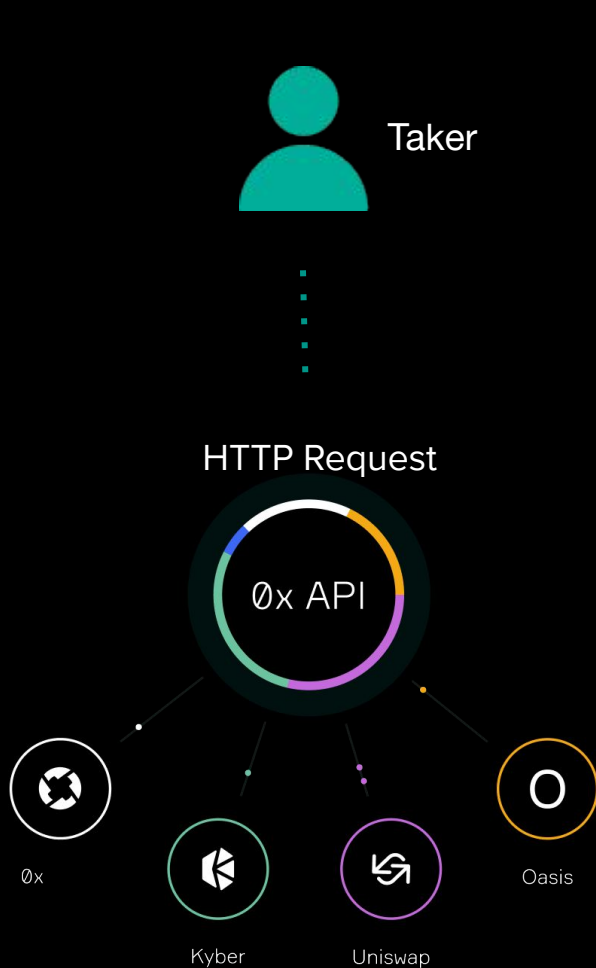
/swap endpoint

0x API

What is it?



```
// Pass in API response to fill the quote  
web3.eth.sendTransaction(...)
```



0x API



HTTP Get Request

Simple quote to buy DAI with 1 WETH

```
https://api.0x.org/swap/v1/quote?buyToken=DAI&sellToken=WETH&sellAmount=10000000000000000
```



GET https://api.0x.org/swap + ...

No Environment



https://api.0x.org/swap/v1/quote?buyToken=DAI&sellToken=WETH&sellAmount=10000000000000000

Save



GET https://api.0x.org/swap/v1/quote?buyToken=DAI&sellToken=WETH&sellAmount=10000000000000000

Send



Params Authorization Headers (5) Body Pre-request Script Tests Settings

Cookies



Response



Click Send to get a response



Swap Tokens with the 0x API



3 simple steps

1. (If needed) Set token allowance
2. Fetch a swap quote
3. Sign the transaction w/ your favorite web3 library

1. (If needed) Set token allowance



```
1 const ZERO_EX_ADDRESS = '0xdef1c0ded9bec7f1a1670819833240f027b25eff';
2 const DAI_ADDRESS = '0xa0b86991c6218b36c1d19d4a2e9eb0ce3606eb48';
3
4 // Selling 100 DAI for ETH.
5 const params = {
6   sellToken: 'DAI',
7   buyToken: 'ETH',
8   // Note that the DAI token uses 18 decimal places, so `sellAmount` is `100 * 10^18`
9   sellAmount: '100000000000000000000',
10  takerAddress: '0xAb5801a7D398351b8bE11C439e05C5B3259aeC9B',
11 }
12
13 // Set up a DAI allowance on the 0x contract if needed.
14 const dai = new web3.eth.Contract(ERC20_ABI, DAI_ADDRESS);
15 const currentAllowance = new BigNumber(
16   dai.allowance(params.takerAddress, ZERO_EX_ADDRESS).call()
17 );
18 if (currentAllowance.isLessThan(params.sellAmount)) {
19   await dai
20     .approve(ZERO_EX_ADDRESS, params.sellAmount)
21     .send({ from: params.takerAddress });
22 }
```

2. Fetch a swap quote



```
23
24 // Fetch the swap quote.
25 const response = await fetch(
26   `https://api.0x.org/swap/v1/quote?${qs.stringify(params)}`
27 );
```

3. Sign the transaction w/
your favorite web3 library



```
28
29 // Perform the swap.
30 await web3.eth.sendTransaction(await response.json());
```

0x API



Why use it?

Best in class performance

Better prices, faster response times, and lower revert rates than any other aggregator on the market.

99.9%

Uptime

Available when you need it

2%

Revert Rate

10x lower than competitors

1.5s

Response Time

2.7% faster than competitors

Resources

Hackathon

Prizes

- Teams that use either 0x API or Swap SDK, 0x is awarding \$500 per team up to 10 teams

Submission Process

- If you plan to build with 0x, fill out form <https://bit.ly/3rNpq86>
- Winners will be announced early March
- [@0xProject](#)

Hackathon Ideas

- **Best use case of 0x API in DeFi**
 - Options swapping
 - Cross-chain swaps
- **Best use case of NFT Swap SDK**
 - Fractionalized NFT swaps Dapp
- **Open track**
 - 0x API SDK

Resources



Docs

- [\(Alpha\) 0x Docs](#)
- [\(Current\) 0x Docs](#)
- Guides
 - [Swapping Tokens w/ the 0x API](#)
 - [Use 0x API Liquidity in Your Smart Contracts](#)

Github

- [0x API Github](#)
- [Get Started with 0x API](#)
- [0x Starter Project](#)

Need help?



Join [0x Discord](#) and jump in the [#ethdenver](#) channel

QR code for presentation



Questions?

POAP

0x + ETHDenver '22

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