

Welcome to Suatheby's.

A Cross-chain Auction house built with SUAVE

Secret sharing through Trusted execution environment (TEE)

This project was built during the Ethglobal London hackathon. Love to share the idea here and the roadmap going forward for anyone wish to help us continue this work.

So imagine when buying an NFT on Arbitrum but all you have is ETH on Polygon.

1. Seller

- 1.1 Upload data in confidential storage in TEE kettle

- Data to be sold could be NFT on any chain, private key, etc.
- Buyer

- 2.2 Bid on asset on the desired chain

1. Reveal data to buyer through the off-chain contract viewing function

This is made possible with the unique architecture of Suave kettle running in TEE which brings enhanced privacy (no-one, not even the host OS, can see unencrypted data) and integrity (you can be sure the correct data, and only that data, is stored at all times).

We have been able to read and write to data in storage and deploy on testnet.

Future work:

1. Enable the bidding process, currently buying is only simply viewing the data stored (the bare minimum for a hackathon)
 2. Data storage specification, NFT on different chains(arb, polygon), possibly with account abstraction
 3. ZK-SNARK the data and reveal only the necessary part of the data during the bidding process

This project has been made possible with the help of the amazing team at Flashbots, debugging and offering tremendous help along the way. After digging into the architecture of SUAVE, I think there are so many more possibilities for it. Will be continuing this work and calling for devs to contribute while at the same time getting more fun pieces growing out of it.

[GitHub](#)

[**GitHub - luckyyang/suathebys: Suatheby's**](#)

Suatheby's. Contribute to luckyyang/suathebys development by creating an account on GitHub.