## **Batch auctions**

CoW Protocol collects and aggregates intents off-chain and settles them together in groups, known asbatches. These batches are then "auctioned off" through a competition to the solver offering the most surplus for the orders in the batch.

Batch auctions provide several benefits:

- MEV Protection
- : Batch auctions allow for Uniform Clearing Prices (UCPs), where an asset that appears multiple times across orders in the same batch settles for a consistent price.
- This makes transaction order irrelevant within the block, undermining the ability for MEV bots to extract value.
- Coincidence of Wants
- : When multiple orders trade the same assets within a batch, there may be an opportunity for a peer-to-peer swap that doesn't tap on-chain liquidity. The mechanism of Coincidence of Wants (CoW) relies on batch auctions.
- Enforcing the Ethereum Best Bid Offer (EBBO)
- : Ensuring that the settlement solution is at least as good as the on-chain price a user could get directly from an AMM. Edit this page Previous Solvers Next Flow of an order