

Never Auction

Developed by **TON RED** team

Github: <https://github.com/tonred/NeverAuction>

DevNet Auction Root: 0:d37297b1eba504c3ec3c9d3c4fab7c3d4eb5152e39e380d727705c20fa8a2ff3

Viewer: <https://never.ton.red>

TG: @Abionics, @get_username

Key features

01

Really blind Vickrey auction

02

No mappings, infinity amount of bids and DeParticipants

03

A lot of custom configurations

04

DeAuction for group bid with interesting concept

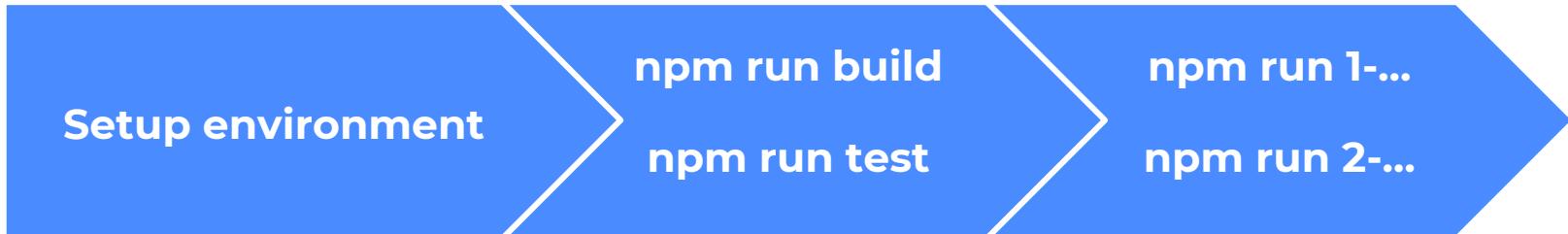
05

Well tested,
30 ts4 tests

06

Browser viewer for auctions

Usage steps



See full technical details in Github repository

Testing

✓	✓	Test Results	1 sec 630 ms
✓	✓	test_auction	1 sec 630 ms
✓	✓	TestAuction	1 sec 630 ms
✓	✓	test_confirm_bid	172 ms
✓	✓	test_confirm_bid_low_value	89 ms
✓	✓	test_confirm_bid_min_value	119 ms
✓	✓	test_finish_wrong_phase	115 ms
✓	✓	test_init	71 ms
✓	✓	test_make_bid	79 ms
✓	✓	test_make_bid_wrong_phase	67 ms
✓	✓	test_make_de_bid_wrong	80 ms
✓	✓	test_many_bidder	157 ms
✓	✓	test_no_bidder_no_winner	76 ms
✓	✓	test_no_winner	93 ms
✓	✓	test_one_bidder	112 ms
✓	✓	test_phases	84 ms
✓	✓	test_remove_bid	121 ms
✓	✓	test_remove_bid_wrong_phase	82 ms
✓	✓	test_twice_confirm_bid	113 ms

✓	✓	Test Results	2 sec 885 ms
✓	✓	test_de_auction	2 sec 885 ms
✓	✓	TestDeAuction	2 sec 885 ms
✓	✓	test_aggregator_remove_stake	179 ms
✓	✓	test_change_stake	134 ms
✓	✓	test_distribution	587 ms
✓	✓	test_init	91 ms
✓	✓	test_phase	210 ms
✓	✓	test_price_calculating	351 ms
✓	✓	test_remove_big_stake	100 ms
✓	✓	test_slash_claims	188 ms
✓	✓	test_slash_fair_aggregator	408 ms
✓	✓	test_slash_forget_confirm_bid	101 ms
✓	✓	test_slash_forget_make_bid	68 ms
✓	✓	test_twice_price_confirm	122 ms
✓	✓	test_two_de_auctions	234 ms
✓	✓	test_wrong_price_confirm	112 ms

Viewer

NEVER auction

 [Install wallet](#)

NEVER Auction #3

[Done](#)

Quoting Price 0.345 EVER

Minimal lot size 5 EVER

Finish time 03:01:49, May 6th 2022

Confirm time 02:59:49, May 6th 2022

DeBid time 02:57:49, May 6th 2022

Fee 1 EVER

Deposit 2 EVER

Address [0:2ce54974d2560ece62fee130a8dacc21d24b9c7d1df3e667ee](#)

Bids

2 ▾

Confirmed bids

2 ▾

DeAuctions

1 ▾

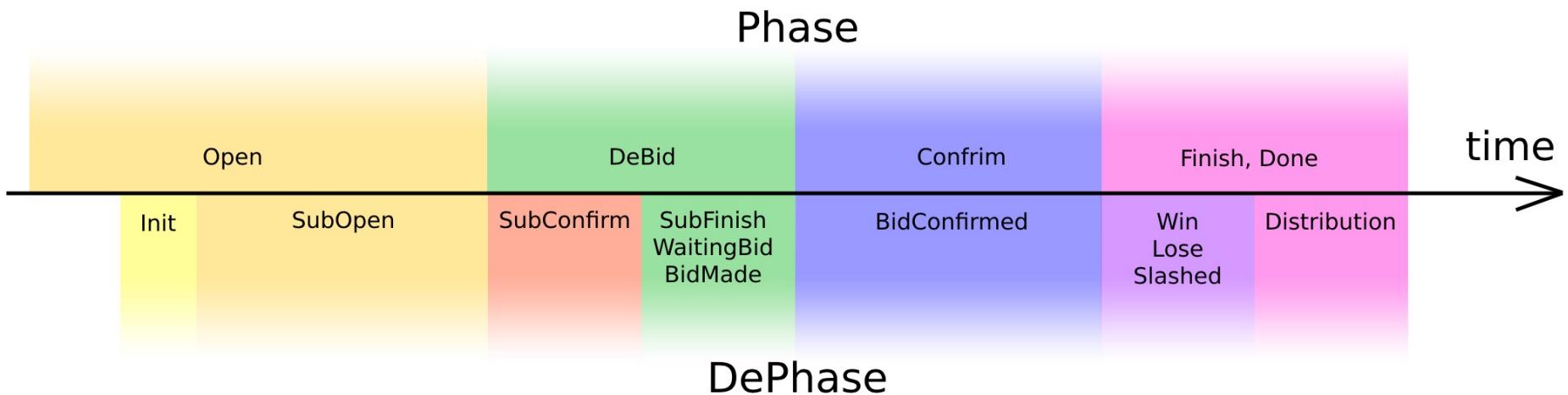
[Show less](#)

NEVER Auction #2

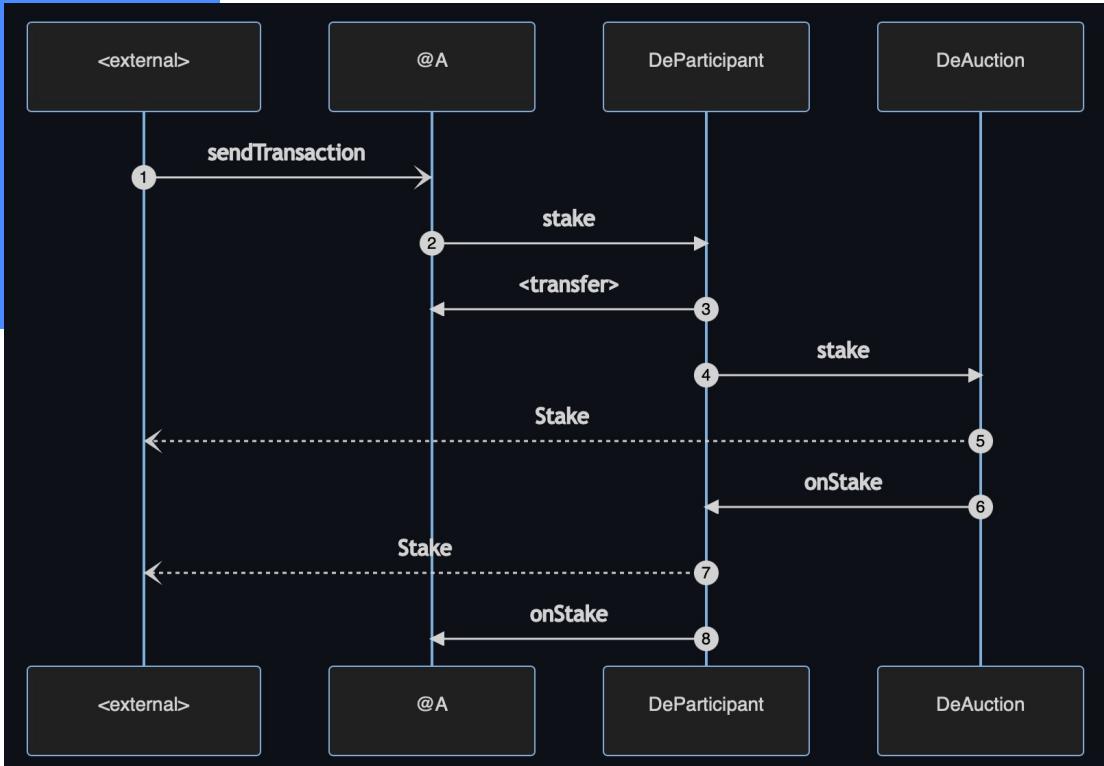
[Done](#)

Auction and DeAuction phases

Both Auction and DeAuction have specific phases. All technical details are described in Github repository. The relation between those phases are shown here



DeParticipant



DeParticipant is a user data for creation and interaction with DeAuction. It is deployed once for each wallet

The sample of such interaction (staking) is shown on diagram on left

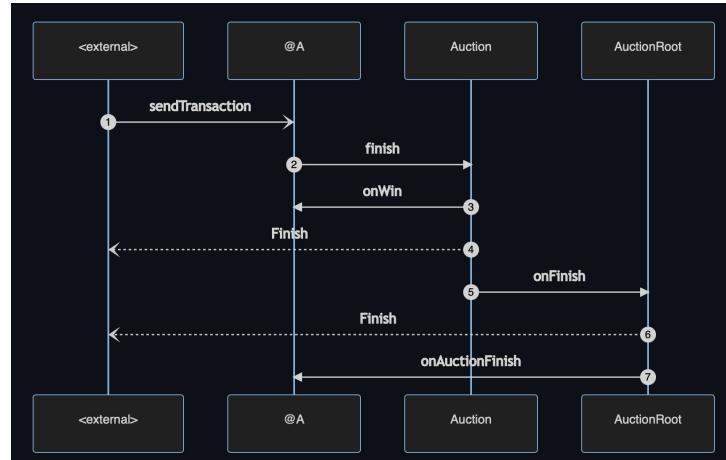
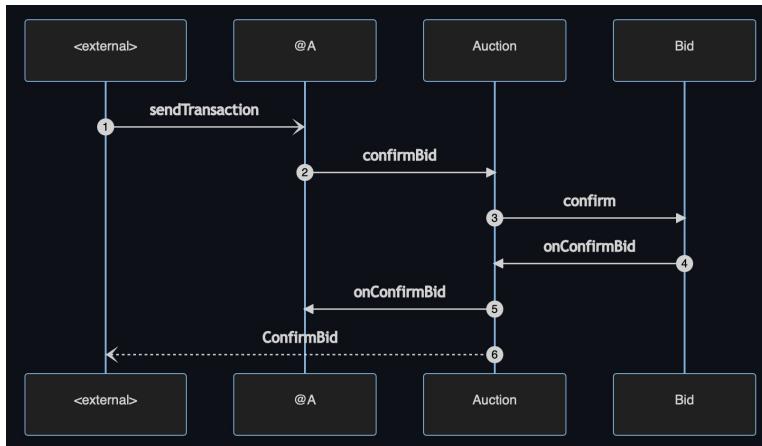
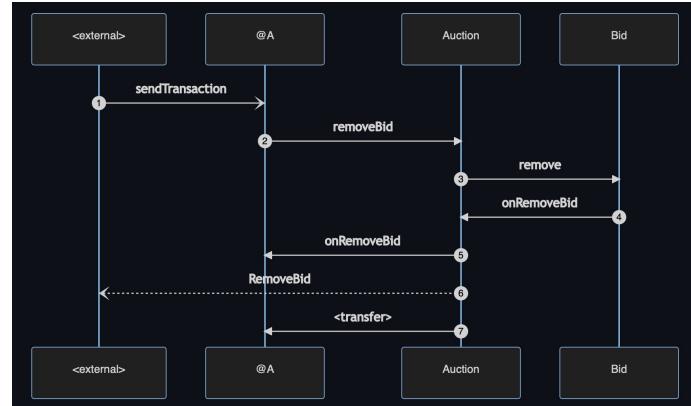
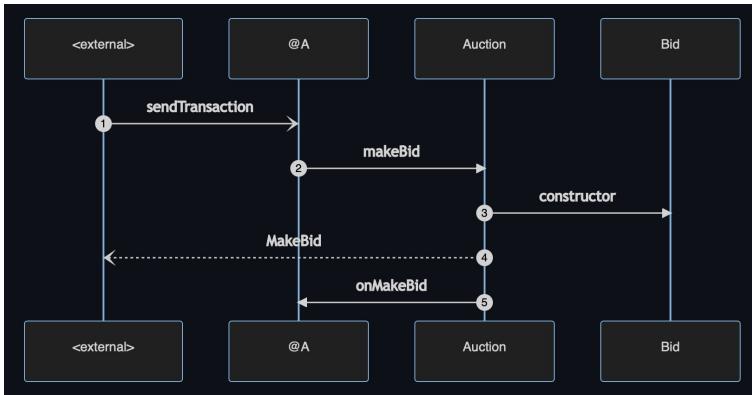
DeAuction price consencus

Consensus price are calculated as average between DeParticipant prices, where each price has weight of its owner's stake. Every DeParticipant can (but not must) provide a hash of desire price

If someone doesn't provide a desire price, or forget to confirm, then his price is not included in final price calculation. But his stake is participating and such DeParticipant will get his reward in case of winning

Consensus price formula: $price_{consensus} = \frac{\sum_p^{participants} p_{stake} * p_{price}}{\sum_p^{participants} p_{stake}}$

Auction diagrams



DeAuction diagrams

