

DeepBook Orders

Users can create limit or market orders, modify orders, and cancel orders. The BalanceManager must have the necessary funds to process orders. DeepBook has four order options and three self matching options. Initially, all trading fees are paid with the DEEP token. Consequently, if you set the `pay_with_deep` flag to `false`, orders automatically fail until the following upgrade.

Users can modify their existing order, reducing the size, lowering the expiration time, or both. Users cannot modify their order to increase their size or increase their expiration time. To do that, they must cancel the original order and place a new order.

Users can cancel a single order or cancel all of their orders.

Following are the order related endpoints that Pool exposes.

The following constants define the options available for orders.

The following constants define the options available for self-matching orders.

Placing a limit order or a market order creates and returns an OrderInfo object. DeepBook automatically drops this object after the order completes or is placed in the book. Use OrderInfo to inspect the execution details of the request as it represents all order information. DeepBook does not catch any errors, so if there's a failure of any kind, then the entire transaction fails.

The OrderDeepPrice struct represents the conversion rate of DEEP at the time the order was placed.

The Fill struct represents the results of a match between two orders. Use this struct to update the state.

DeepBook emits OrderFilled when a maker order is filled.

DeepBook emits OrderCanceled when a maker order is canceled.

DeepBook emits OrderModified on modification of a maker order.

DeepBook emits OrderPlaced when it injects a maker order into the order book.

Place a limit order. Quantity is in base asset terms. For current version `pay_with_deep` must be true, so the fee is paid with DEEP tokens.

You must combine a BalanceManager call of generating a TradeProof before placing orders.

Place a market order. Quantity is in base asset terms. Calls `place_limit_order` with a price of `MAX_PRICE` for bids and `MIN_PRICE` for asks. DeepBook cancels the order for any quantity not filled.

Modifies an order given order `id` and new `quantity`. New quantity must be less than the original quantity and more than the filled quantity. Order must not have already expired.

The `modify_order` function does not return anything. If the transaction is successful, then assume the modification was successful.

Cancel an order. The order must be owned by the `balance_manager`. The order is removed from the book and the `balance_manager` open orders. The `balance_manager` balance is updated with the order's remaining quantity.

Similar to `modify`, `cancel_order` does not return anything. DeepBook emits OrderCanceled event.

Withdraw settled amounts to the `balance_manager`. All orders automatically withdraw settled amounts. This can be called explicitly to withdraw all settled funds from the pool.

API

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