Flex-E-Markets (Client) User Guide

Version July 2020

---

1. ABOUT FLEX-E-MARKETS

Flex-E-Markets allows users ("clients") to access tailor-made marketplaces where assets/commodities/services can be traded in double-sided auctions. The mechanism of trade depends on how the marketplace is configured. Exchange can be continuous, or markets may be cleared intermittently; the "book" (list of orders that have not executed yet) may be open for everyone to see and react to, or it may be PRIVATE, in which case the client has to determine which other party his/her orders go to; only that party can see the order, and if it executes, only that party will know.

We document here how to access Flex-E-Markets for manual trading. Trading can be done in an automated way as well, through e.g. Python scripts. Details can be found in the FMClient documentation, which describes a Python package that automated traders can use to simplify interaction with the system; the API details are left to the package, so that the Python programmer can focus on monitoring the market and submitting orders.

2. LOGGING ON

The system administrator for your account will have set up an ID and password for you. Navigate to http://flexemarkets.com and click on the "sign in" link in the top right corner. Then type in the account name, your ID and your password.

Once done, you land on a page with a list of Marketplaces you have access to. Click on the Marketplace name you want to go to.

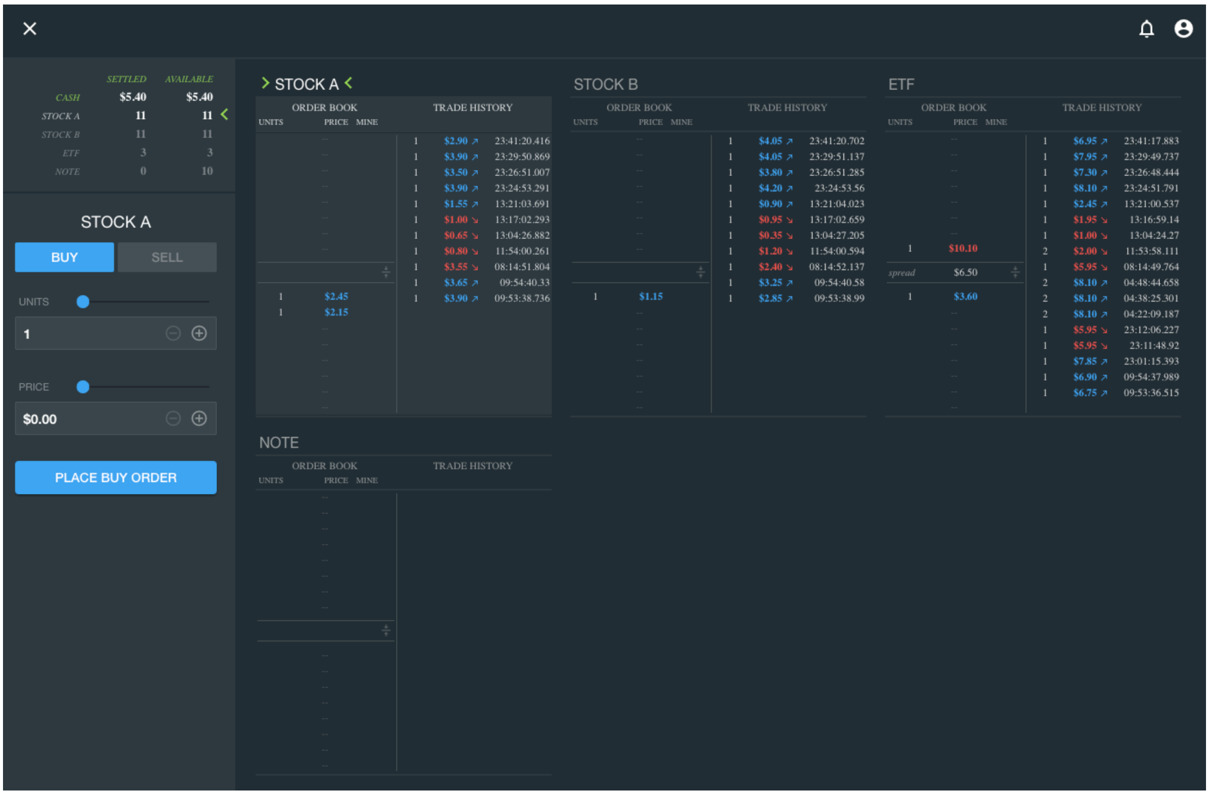
You land in the Marketplace, unless it is closed (it will say so). Otherwise you'll see a list with your holdings, an order form, and order books plus trading history for all markets, even those that may be closed or where you are not allowed to trade.

You log out by clicking on the face in the top right corner.

3. THE MARKETPLACE INTERFACE

Below is a screenshot of a typical marketplace. There are four markets, for four assets: Stock A, Stock B, ETF, and Note. The order book for the Note is empty. The other order books contain offers to sell/asks (in red) and offers to buy/bids (in blue), as well as trade history. In the trade history, blue entries reflect trades that were prompted by a bid (i.e., a buy order hit a standing sell offer); red entries correspond to trades caused by an offer.

In the top left corner is a list of current holdings of the assets, plus cash. "Current holdings" reflect what you *actually hold*. "Available holdings" are obtained by subtracting the units you committed to the marketplace because of orders you submitted that have not been traded yet (i.e., they sit in the book), plus any shortsales you are allowed (committing to offers for quantities you do not own, with the obligation to pay, at the end of trading, whatever the asset promised).



For instance, if you send in an offer to sell 2 units of Stock B, and the offer is added to the book because it did not trade, then your "available" units of Stock B will go down by 2 units; your "settled" quantity remains unaltered.

If you send in an offer to buy one unit of Stock A, at say $3.00, and the order is added to the book because it did not trade, then your available CASH will go down by 3 dollars.

Cash cannot go negative. That is, you can never "shortsell" cash. Whether you can shortsell assets depends on how the administrator has configured the Marketplace.

You place order through the ORDER FORM on the left-hand-side. The Order Form applies to the market you choose by highlighting its order book. In the figure, the order book (and trade history) of Stock A is highlighted, so the Order Form applies to Stock A (as it says on top of the Order Form). You choose to buy (blue) or sell (red), choose how many units, and at what prices, and then hit the Place Buy/Sell Order button.

All orders that go to the marketplace are LIMIT ORDERS. This means that they execute at the price you indicated, or a better price.

Clearing rules are standard. When the marketplace is continuous, orders that cross (come with a price better than) the best standing order on the other side execute at the STANDING ORDER price. For instance, in the above figure, if one were to send in a sell order (ask; red) for Stock A at $1.00, a trade will take place (since the price is below that of the best standing bid, which is $2.45), and the trade will execute at the price of $2.45.

Strict price/time priority is adhered to: standing orders at a better price (lower ask or higher bid) execute first; orders at the same price execute in the order they arrive into the marketplace.

You CANCEL your orders by clicking the x next to an order in the book. The x will appear in the column "mine."

When a market is PRIVATE, you will be given the opportunity, in the order book, to indicate which participant your order is aimed at. The Order Book will only show orders that were sent to you; and you will be able to see who sent the order.