

Manual order ticket / Order Entry interface to trade single & Basket of names at NASDAQ (OUCH), ARCA (DIRECT) and BATS (FIX)

The Windows based GUI is built on Qt 4.6 and uses files to interact with the Linux based EMS. The ticket captures the user inputs and prepares a serialized format string of the order. It then writes it off to a file under a folder that is shared between the GUI and the EMS.

To ensure data synchronization between the GUI and the EMS, a lock (.lqk) file is written to the shared folder under the same name (For example, if the data file is *Ouch.txt*, then the GUI writes a lock file under the name *Ouch.lqk*). EMS will not read the data until this lock file is removed. Once that lqk has been removed, EMS loads the data by reading the data (in example, *Ouch.txt*) file. Once it has finished reading the data, EMS deletes the data file. Sometimes, though the data file would be present the contents may take time to reach the EMS because of network latency. In those cases, the EMS would be reading an empty file. To avoid this, the EMS would sleep and wait for the data contents to arrive on its side. After reading the serialized data format string, it uses the OrderInfoFactory to de-serialize the string into an appropriate order info object. This object is then placed to the Core EMS for execution.

The response logs that comes from the EMS is also written to a shared file that is mapped in a properties file of the Manual Order Ticket.

The Manual Order Ticket has implemented a functionality similar to 'tail -f' on Linux. By this, the log file is constantly polled (with some sleep) to check for the arrival of new data by querying the last modified time. On a new data arrival, the GUI picks it up, formats it and renders it on to the appropriate tab (it can be an Open Order/Completed Order/Cancelled Order/Rejected Order/Replaced Order tab) of the GUI.

Captures all requirements for the Manual Order Ticket GUI for Hellespont Capital Management. The traders should be able to access the GUI from a centralized windows deployment via Citrix terminals. They should be able to create and place orders for different exchanges through this GUI to the back-end EMS-es running on their respective Linux boxes.

Features:

1. The "Place Order" form is used to place a single order. All the necessary parameters needed for New Order, Cancel Order, and Cancel Replace provided in this form.
2. The Order Token would be automatically incremented on every submit.
3. Place Batch orders through a .csv file. Ex: The format for this file is specified in the 'sample_batch_order_data.csv'.
4. The response logs are captured "dynamically" in the following tabs: Open Orders, Cancelled Orders, Completed Orders, Rejected Orders, and Replaced Orders.
5. Certain field values are set to default ones: Order Token: Auto-incremented for New and Replace Orders, Firm: ETCG, Sweep: No...