THE NASDAQ OMX GROUP, INC.

Changes to NASDAQ OMX Infrastructure

Match ID and OMnet Broadcasts

Version 1.0
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Table of Contents

1.0 New Match ID definitions for Genium INET

NASDAQ OMX is upgrading to a faster infrastructure which will reduce the latency of all broadcast including BO5 and BD70. To this, the structure of the Match ID will change according to description below, as well as the maximum size of the OMnet broadcasts. The changes will go-live March 17th, 2014.

1.1 Current Implementation of MatchID

- Execution Event Number (64 bits) – Identifies the event. Similar to an order Id. All output generated as a result of the event (e.g input of an aggressive order) will get the same number. In case of a combo match all resulting matches will have the same number.
- Match Group (32 bits) – Used to identify the deal together with the execution event number. Updated per price level hit by an aggressive order.
- Match Item (32 bits) – Each trade within a deal is assigned a number making the complete Match ID unique for the trade.

1.2 Future Implementation of Match ID per Technical Interface

1.2.1 OMnet API – Match ID struct shall be interpreted differently

- Execution Event Number (64 bits) – Unique ID for each generated deal, which comprises the buyer and seller per order book and price.
- Match Group (32 bits) –Unique identifier that links all leg trades to the combo trade. All generated trades from a combo match will share this id.
- Match Item (32 bits) – Not used

1.2.2 FIX - The TrdMatchID (880) contains the match id generated by the system. TrdMatchID will hold the Execution Event Number and Match Group base 64 encoded. To separate execution event and match group decode Base 64 to binary and use the first 8 bytes for execution event and the last 4 bytes as match group.

1.2.3 ITCH 1.0 - The 12 byte ITCH match id field shall be interpreted differently:
- The first 8 bytes is the unique identifier for each generated deal, which comprises the buyer and seller per order book and price.
- The next 4 bytes is the unique identifier that links all leg trades to the combo trade. All generated trades from a combo match will share this id.

2.0 Changes to the size of OMnet broadcasts

NASDAQ OMX will start to send out broadcasts that are bigger than 1400 bytes. This means that users listening to NASDAQ OMX OMnet broadcasts needs to have a minimum receive buffer at 64K when calling:
cstatus = omniapi_read_event_ext_ex (hSession, evtype, rcvbuf, rcvlen, evtmsk, optmsk]

Please see OMnet Application Programmer´s Interface manual for further information.
http://www.nasdaqomx.com/transactions/technicalinformation/geniuminet/protocolspecifications