

# Information Memo



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New York, NY 10005

**NYSE Operations**

**October 13, 2010**

**TO: ALL MEMBERS, MEMBER ORGANIZATIONS  
and Vendors Interfacing with the Common Customer Gateway<sup>SM</sup> (CCG)**

**SUBJECT: Introducing New Binary Common Customer Gateway<sup>SM</sup> (CCG) and  
NYSE UTP Direct Message API**

**Route To: Business Leaders, Technology and Operations Officers, Trading Desks  
and Order Rooms**

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The NYSE will be introducing a Binary Common Customer Gateway that is designed to be a new strategic entry point into the NYSE and NYSE Amex market centers for customers wishing to transact using a new optional order entry method protocol, UTPDirect. This new, faster protocol reduces bandwidth and latency by using smaller messages than a standard FIX message with minimal internal message translation.

The full suite of NYSE order types are available using this new protocol format for orders routed to the NYSE matching engine, Display Book<sup>®</sup>. However, the initial implementation will not support orders destined for either NYSE BBSS<sup>®</sup> or the NYSE e-Broker<sup>™</sup> handheld.

## **Customer Session Requirements:**

In order to take advantage of this enhancement, the following customer connection changes are required:

1. Support new NYSE UTPDirect API Specification version 1.4 dated August 19, 2010
2. Establish new unique IP and Port connections (SenderComplIDs) to the new Binary Common Customer Gateway(s).
3. Establish new unique IP and Port connections to the NYSE Drop Copy Concentrator, if applicable.
  - a. Drop copy messages entered through a Binary CCG connection cannot be used with existing FIX CCG drop copy lines. Customers must establish a new unique

drop copy connection in order to receive any drop copy messages for orders sent to a Binary CCG.

4. Customers may optionally request new mnemonics to be designated for their new Binary CCG connections.

## **Summary of Customer Changes/Impacts**

The following outlines at a high-level the differences between a UTPDirect and a FIX implementation. For complete details, please refer to the NYSE UTPDirect API Specification.

### **1. Order & Cancel Processing Changes -**

- a. SenderCompID - Not required on every order message in UTPDirect. Sent only in the Session Login message.
- b. DOTReserve – New field defined in UTPDirect protocol to designate an incoming order as a DOT Reserve order. No FIX Tag equivalent.
- c. SecurityExchange field - Not supported on incoming order/cancel messages in UTPDirect. Also not returned on orders/cancel acknowledgements and/or reject messages. (Equivalent of FIX Tag 207).
- d. RoutingInstruction – Single field defined to designate the routing instruction on an incoming order (combines FIX Tag 57 and FIX Tag 9487).

### **2. Report Changes -**

- a. The UTPDirect Protocol supports a short and a long report format. Customers must specify at login which report message format they wish to receive during the trading day.
  - i. The Order Fill (Short) message returns only a subset of fields in order to maximize the reduction of message latency.
  - ii. The Order Fill (Verbose) message returns all of the fields currently returned with the FIX Protocol implementation with the following exceptions:
    1. SecurityExchange – FIX Tag 207 equivalent
    2. ERCReferenceNumber – FIX Tag 9440 equivalent
    3. PrevExpERCReference Number – FIX Tag 9704 equivalent
- b. ExecID field now contains only the expanded activity ID information. Your client order id information is no longer combined in this field.
- c. DBExecID field (equivalent to DBKLinkID - FIX Tag 9483) has been expanded from 6 to 10 bytes.

### **3. Activity IDs -**

- a. The UTPDirect protocol only supports the expanded activity ID format for both order and drop copy connections. (e.g. RRRRRSSSSS). Customers and customers drop copy recipients must be able to support the 2-part expanded activity id format in the ExecID (equivalent of FIX tag 17) or ExecRefID (equivalent of FIX Tag 19) fields for the following message types:
  - i. Order Fill (Short) message type 2.1.
  - ii. Order Fill (Verbose) message type X.1.
  - iii. Bust/Correct message type C.1.
- b. The UTPDirect protocol will not return the old 3-part activity ID nor will it return the following fields currently supported in the FIX implementation:
  - i. ERCReferenceNumber – FIX Tag 9440
  - ii. PrevExpERCReference Number – FIX Tag 9704

#### 4. Drop Copy -

- a. All order, report and admin drop copies will continue to be returned in FIX message format. The initial implementation does not support a Binary drop copy format.
- b. .
- c. For order drop copies, only the fields supported in the UTPDirect protocol will be returned.
- d. All current report drop copies fields will be returned in FIX message format with the following exceptions:
  - i. Drop copies will not provide the old 3-part activity ID nor will it return the following fields currently supported in the FIX implementation:
    1. ERReferenceNumber – FIX Tag 9440
    2. PrevExpERReference Number – FIX Tag 9704
  - ii. Drop copies will not return the SecurityExchange field (equivalent of FIX Tag 207).

#### 5. Other -

- a. The initial implementation will not support the recently introduced Auto-Cancel upon Disconnect service in the FIX protocol. It is anticipated that this feature will be added later in the 1<sup>st</sup> quarter of 2011.
- b. Prior-day GTC executions originally entered over your FIX connection will continue to be returned over that same FIX connection. Customers wishing to transfer these messages over to their new Binary connections must cancel all existing GTC orders and resubmit over their new Binary connection line(s).

### Testing

The NYSE User Acceptance Test environment will be available on or about October 15<sup>th</sup>. UAT testing is available from 9 a.m. to 10 p.m. ET daily with support provided between the hours of 9 a.m. and 5 p.m. ET. Customers must establish new test IP addresses and ports to test this new service.

For all UAT testing connectivity and arrangements, please contact Firm Testing Services at 1-888-689-7739 Option 2 or send an email to [Firmtesting@nyx.com](mailto:Firmtesting@nyx.com).

### Summary

It is anticipated that this feature will be available early in the first quarter of 2011. A future notification will provide additional information regarding exact implementation dates.

Please contact your Relationship Manager or one of the below contacts should you have any further business questions or comments:

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