TO:	**BOX Options Participants**
FROM:	**BOX Market Operations Center**
SUBJECT:	**New UDP Multicast Feed for the HSVF**
DATE:	**March 25, 2015**

BOX Options Exchange ("BOX") plans to introduce a new transmission mechanism, the UDP Multicast Feed, for its High Speed Vendor Feed "HSVF" in Q2 2015.

The UDP Multicast Feed will be optional and will be offered to all market participants in addition to the existing TCP Feed which will remain unchanged.

Technical Details

The message and transmission formats for the UDP Multicast Feed will be the same as the existing formats used for the TCP Feed.

Participants will establish connectivity to the UDP Multicast Feed by sending an IGMP request to register on a specific Multicast address and UDP port. Once connected, Participants will begin to receive inbound messages.

For every slice (x = 1 to 8), three (3) different lines will be available, each providing a subset of the complete UDP Multicast Feed:

LINE ID	HSVF PROTOCOL VERSION	DEFINITION	MESSAGE TYPES INCLUDED
x1	C5	Complete Feed including the Best Limit (Top-of-the-Book)	C, CS, D, **F, FS**, GC, GR, GS, I, IS, J, JS, L, M, MS, N, NS, O, OS, Q, QS, S, T, TS, U, V, Z, [KI, KO, RB, RE, ER][1]
x5	C5	Complete Feed including the market depth message types and the first Implied Limits	C, CS, D, GC, GR, GS, **H, HS**, I, IS, J, JS, L, M, MS, N, NS, O, OS, Q, QS, S, T, TS, U, V, Z, [KI, KO, RB, RE, ER][1]
xP	C5	Price Improvement and Exposed Order message types	GC, GR, GS, J, JS, **M, MS,** N, NS, **O, OS**, Q, QS, S, **T, TS**, U, V, Z, [KI, KO, RB, RE, ER][1]

For redundancy purposes, two identical instances of the UDP Multicast Feed will be available: "A" and "B" feeds. Both offer identical data and clients can choose to receive either or both.

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[1] Message types send in TCP Retransmission mode only.

On each of these feeds, all messages will be numbered sequentially. Therefore, the Gap Sequence message type ('W') will not be found in the UDP Multicast Feed.

The Instrument Dictionary (message types Q, QS, J, JS, N and NS) will be sent daily at 1:35 am. Participants connecting to the UDP Multicast Feed must make sure to connect before that time in order to receive the complete list of listed instruments.

To receive previously sent or missing UDP Multicast Feed messages, participants will need to request a retransmission using a separate TCP connection. Please refer to the "SOLA® HSVF UDP Multicast Specifications Guide for BOX v 1.0" for a complete description on how to manage retransmissions.

Testing

Participants interested in testing this new feature may do so in the BOX Test environment starting April 2015. Because VPN connections are not compatible with UDP Multicast Feeds, the test UDP Multicast Feed will only be available from the Production POPs. Please refer to the "SOLA® Network Connection Specifications for BOX v2.0" document for specific connectivity details.

The implementation timeline is as follows:

IMPLEMENTATION DATE	DESCRIPTION	LOCATION
Available now	TCP Retransmission feature	Test Environments (VPN)
End of April 2015	UDP Multicast populated with Production Market Data	NY10 Production
June 2015	UDP Multicast populated with Test Market Data	NY4 Production

10 Gbps Connectivity

In conjunction with the UDP Multicast Feed deployment, BOX reminds Participants that they may upgrade their connections to use BOX's low latency 10 Gbps switches.

Contact

Please contact the Market Operations Center at (866) 768-8845 or by e-mail at BOXMOC@boxexchange.com should you require additional information.