UMDF FIX/FAST and Conflated – Platform Update

Customer Impact Document

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REVISION HISTORY

Date	Version	Description	Author
11-24-2023	1.0	Minor changes in UMDF FIX/FAST and UMDF Conflated platform behavior.	SZA, EVJ
01-22-2024	1.1	Adding behavior changes for trade deletion messages and Security Status messages. Removing behavior change for SecurityAltIDSource in repeating group NoSecurityAltIDs	JPM
02-27-2024	1.2	Removing behavior change for NetChgPrevDay field. Therefore, the information will be available in the first trades of the day as result of an opening auction. Removing behavior change for Security Status messages. Therefore, messages will be published only on the channel where there are associated instruments. The behavior change about field SecurityAltID (tag 455) was moved to correct section “Behavior changes in SecurityList”. Described in more detail the grouping behavior in Security List Messages. Adding behavior changes for field TradeDate (tag 75) in PriceBand, QuantityBand, AuctionImbalance and Order Messages.	SZA, JPM, VMU

03-08-2024	1.3	Adding behavior change for News messages generated by news agencies on Channel 63 and replicated on Derivative channels.	VMU

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ABBREVIATIONS

Abbreviation	Description
FAST	FIX Adapted for Streaming – a specification for data compression to reduce bandwidth usage, especially for market data feeds.
FIX	Financial Information Exchange Protocol
PUMA	PUMA Trading System
SBE	Simple Binary Encoding
UMDF	Unified Market Data Feed
VWAP	Volume-Weighted Average Price

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CONTACTS

- Services Development Department: handles all enquiries for connectivity setup and general exchange supported services.
    - contratacao@b3.com.br
    - +55 11 2565-5081
- Certification and Testing Center: performs certification of all software solutions applying for Order Entry and Market Data connectivity.
    - tradingcertification@b3.com.br
    - +55 11 2565-5029
- Trading Support Department (TSG): provides real-time connectivity monitoring and troubleshooting.
    - tradingsupport@b3.com.br
    - +55 11 2565-5021

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1 Introduction

The Unified Market Data Feed (UMDF) FIX/FAST and Conflated Platforms are receiving a major update. The FIX/FAST messages will be synthesized from Binary Market Data (SBE) messages, and for compatibility issues, some messages from the FIX/FAST Incremental feed will have a minor impact, slightly changing their behavior.

The changes, old and new behaviors are described in the next sections below.

2 Behavior changes in SecurityList messages (35=y)

2.1 Grouping

Number of instrument definitions per message in the incremental stream.

Old behavior:

- A single SecurityList message can have one or more instrument definitions (repeating group “RelatedSym”).

New behavior:

- Every SecurityList message will have just one instrument definition (number of repeating groups “NoRelatedSym” is always 1).

The old behavior remains for the instrument streams.

2.2 Field SecurityAltID (tag 455) in repeating group NoSecurityAltIDs (tag 454)

Removed leading zeros from SecurityAltID when SecurityAltIDSource value is equal to 'H'.

Old behavior:

- Some SecurityAltID values had a leading zero when the SecurityAltIDSource value was equal to 'H'.

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New behavior:

- No SecurityAltID values have a leading zero when the SecurityAltIDSource value is equal to 'H'.

2.3 ApplFeedID (tag 1180) in repeating group NoApplIDs (tag 1351)

Channel numbers will always be padded with zeros.

Old behavior:

- The channel number can be padded with zeros or not. For instance: “MBO001” or “MBO1”, “MBO010” or “MBO10”.

New behavior:

- The channel number will be always padded with zeros, having three decimal digits. For instance: “MBO001”, “MBO010”.

3 Behavior changes in Incremental messages (35=X)

3.1 Grouping (only for UMDF FIX/FAST, not for UMDF Conflated)

The frequency of incremental messages will increase, with smaller size.

Old Behavior:

- Incremental messages less frequent and large, with many repeating groups

New Behavior:

- Incremental messages will be more frequent and smaller with fewer repeating groups.

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3.2 Field MDEntrySize (tag 271) for single order deletions

The field MDEntrySize will be sent for order deletions if available.

Old behavior:

- Field MDEntrySize (tag 271) is not sent for order deletions: MDEntryType (tag 269) = “0” (BID) or “1” (OFFER), MDUpdateAction (tag 279) = “2” (DELETE)).

New behavior:

- Field MDEntrySize is sent if available.

3.3 MDEntryType VWAP (269=9)

VWAP will be published only at the “End of Event” time (usually at each trade, but if several trades resulted from a single aggressor order matching several orders, then VWAP will be published only after all those trades).

Old behavior:

- VWAP (value-weighted average price) is published every time its value is changed (usually at each trade).
- VWAP is published in a MDEntry in the same message of related trades.

New behavior:

- VWAP is published in a separate message after the last Trade message of current event.
- The scale (number of digits after the decimal point) will be fixed to 8.

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3.4 Fields MDEntryBuyer (tag 288) and MDEntrySeller (tag 289) for trade deletions messages

Trade deletion messages will not carry MDEntryBuyer and MDEntrySeller fields.

Old behavior:

- Fields MDEntryBuyer (tag 288) and MDEntrySeller (tag 289) were sent in Trade deletions messages.

New behavior:

- Fields MDEntryBuyer (tag 288) and MDEntrySeller (tag 289) will not be sent in Trade deletions messages.

3.5 Fields MDInsertDate (tag 37016) and MDInsertTime (tag 37017) for trade deletions messages

Trade deletion messages will not carry MDInsertDate and MDInsertTime fields.

Old behavior:

- Fields MDInsertDate (tag 37016) and MDInsertTime (tag 37017) were sent in Trade deletions messages.

New behavior:

- Fields MDInsertDate (tag 37016) and MDInsertTime (tag 37017) will not be sent in Trade deletions messages.

3.6 Field SellerDays (tag 287) for trade deletions messages

Trade deletion messages will not carry SellerDays field.

Old behavior:

- Field SellerDays (tag 287) was sent in Trade deletions messages when available.

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New behavior:

- Field SellerDays (tag 287) will not be sent in Trade deletions messages.

3.7 Field TradeDate (tag 75) for PriceBand (269=g), QuantityBand (269=h), AuctionImbalance (269=A) and Order messages (269=0 or 269=1)

PriceBand, QuantityBand, AuctionImbalance and Order messages will not carry the TradeDate field.

Old behavior:

- Field TradeDate (tag 75) was sent in PriceBand, QuantityBand, AuctionImbalance and Order messages.

New behavior:

- Field TradeDate (tag 75) will not be sent in PriceBand, QuantityBand, AuctionImbalance and Order messages.

4 Behavior changes in News messages (35=B)

4.1 News messages (35=B) generated by news agencies on Channel 63 replicated on Derivative channels

News messages generated by news agencies and published on Channel 63 will not be replicated on Derivatives channels (only for UMDF FIX/FAST, since we do not have this replication in UMDF Conflated).

Old behavior:

- The Derivatives channels published News messages from all sources (messages generated by the matching engine and messages generated by news agencies).

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New behavior:

- News messages generated by the matching engine will continue to be published on Derivatives and Equities channels.
- News messages from news agencies will be published only on Channel 63.

4.2 NewsID (tag 1472)

NewsID is the unique identifier for News message.

Old behavior:

- NewsID was not sent in News (tag 35=B) message.

New behavior:

- NewsID will now be sent in News (tag 35=B) message.