LTSE

Specification Errata

11/6/2026

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1 Session Level Specifications

1.1 MEMX-UDP (v1.0 to v1.1)

V1.1

- Clarified SequencedMessage payload field encoding with additional table and added example.

1.2 MEMX-TCP (v1.0 to v1.2)

V1.1

- Removed the following text: “If the client requests a next sequence number of 0, the server will begin streaming at whatever the next sequence number of the session is at the time the request is received.” As this feature has been deprecated in version 1.1.

V1.1a

- Added 'T' Request Mode to Login Accepted message indicating “Snapshot” mode.
- Updated Stream Request, Replay Request, and ReplayAll Request denoting which Request Mode these requests will be accepted in.

V1.2

- Added/Clarified wording Regarding Login Rejected, Stream Rejected, and Replay Rejected Messages to denote that the connection will be shutdown by the server if these messages are sent to the client.

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2 Order Entry Specifications

In v1.3, the order entry protocol was updated to send an ExecutionReport_Restatement message when an order with a SingleReprice instruction, which was repriced and displayed away from its booking price upon entry, is updated by the system to display at its booking price. The message is sent to indicate that while the position in the order book has not changed, the display price of the order has been updated and reflected in the MEMOIR Depth feed. In addition, the protocol will send ExecutionReport_Restatement messages associated with order reprice before any potential executions occur to inform the user of the price that their order has been moved to. This change ensures the user is notified of the price change prior to any executions being reported at that price.

2.1 MEMO – FIX (v2.0)

V2.0

- Added Execution Details Type (custom FIX tag 21038)
- Added Message Field Type – ExtendedExecInst (custom FIX tag 21041)
  - Added to NewOrderSingle message
  - Added to New Order Acknowledge Execution Report
- Added InvalidExtendedExecInst to Order Reject Reason Code (FIX tag 103)
- Added ordStatus code 4 - Canceled on Trade to Cancel/Correct message
- Added AuctionId (custom FIX tag 21040)
  - Added to Execution Reports: Trade, Trade Cancel/Correct, Auction Status, Auction Trade, Broken Auction Trade, Corrected Auction Trade
- Added AuctionType (custom FIX tag 21039)
  - Added to the Execution Reports: Trade, Trade Cancel/Correct, Auction Status, Auction Trade, Broken Auction Trade, Corrected Auction Trade
- Removed Pending New Execution Report

2.2 MEMO – FIX (v1.0 to v1.12)

V1.1

- Added the following Order Reject Reason Codes:
  - 159 - InvalidSelfTradePreventionConfiguration
  - 160 - InvalidSelfTradePreventionType
  - 161 - InvalidRiskGroupId
  - 162 - FirmDisabled
  - 163 - MPIDDisabled
  - 164 - AccountDisabled
  - 165 - NoNBBOAvailable
  - 166 - CannotTradeNonTestSymbol
  - 167 - MissingFirm
  - 168 - MissingAccount
  - 169 - MissingMPID

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    - 170 - MissingRiskGroup
- Removed the following Cancel Reason Codes:
    - 2 - ImmediateOrCancel
    - 3 - FillOrKill
- Added OrdType tag to Trade and Replaced Execution reports
- Updated LastLiquidityInd custom values
    - 51 - AddHidden
    - 52 - AddMidpoint
    - 53 - AddNbboImprove
- Changed the name of the tag 41 to OrigClOrdID in ExecutionReport_Replace message
- Added AvgPx tag to PendingReplace Execution report
- The Order Reject Reason Code MaxMsgThrottleRiskRuleBreach was renamed to MaxOrderRateRiskRuleBreach
- Added the following Order Reject Reason Codes:
    - 171 - DailyMarketOrderGrossNotionalExposureRiskRuleBreach
    - 172 - DailyMarketOrderNetNotionalExposureRiskRuleBreach
- Added Restatement support for Self Trade Prevention
- Added TimeInForce to Replaced Execution report. Used TimeInForce instead of TIF for tag name
- Added MissingDispMethodType to Order Reject Reasons
- Added CxlReason InvalidLocate and ExchangeClosed. Removed InvalidPriceIncrement suffices.
- Added required OrderID tag to Reject. Removed unused standard FIX RejectReasons.
- Added Canceled as possible OrdStatus for Restatement
- Denoted custom LTSE tags

V1.2

- Modified OrdType (Tag 40) to use ‘P’ for Pegged (rather than ‘5’)
- Added new possible value for LastLiquidityInd (tag 851) new value 54 = AddNbboJoin
- Added the following custom CxlRejReason codes:
    - 119 - BlockSessionRiskRuleViolated
    - 120 - BlockSellShortRiskRuleViolated
    - 121 - MaxSharesPerOrderRiskRuleBreach
    - 122 - NoNBBOAvailable
    - 123 - MaxNotionalValuePerOrderRiskRuleBreach
    - 124 - MaxADVPercentPerOrderRiskRuleBreach
    - 125 - PricePercentCollarRiskRuleViolated
    - 126 - PriceValueCollarRiskRuleViolated
    - 127 - HardToBorrowSecurityRiskRuleViolate
- Added the following CancelReason codes:
    - 17 - FirmDisabled
    - 18 - MPIDDisabled
    - 19 - AccountDisabled

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    - 20 - NotionalExposureRiskBreached
- Added the following Order Reject Reason Codes:
    - 174 - RejectReason_MissingFirmRiskSetting
    - 175 - RejectReason_InvalidAccountMPIDToFirm
    - 176 - RejectReason_InvalidPegOffsetValue
- Support HeartbeatInt value 0.

V1.3

- Use correct FIX name (PegPriceType) for Tag 1094
- Added the following custom CxlRejReason codes:
    - 128 - InvalidSide
    - 129 - InvalidOrdType
- Removed TimeInForce tag from OrderCancelReplaceRequest
- Added note in ExecutionReport_Restatement regarding the sending of the event when a SingleReprice order is re-displayed at its booking price

V1.4

- Added new Liquidity codes to LastLiquidityInd field (FIX tag 851) for retail fills.
- Added new CustOrderCapacity type (FIX tag 582), value 5 = Retail Customer

V1.5

- Clarified the definition of DisplayMethod tag.

V1.6

- Added text indicating that the Pending New execution report message is sent by default and may be disabled upon request.
- Added the following Order Reject Reason codes:
    - 177 - MissingSTPGroupId
    - 178 – InvalidSTPGroupId

V1.7

- Added the following Liquidity Code:
    - 160 - RetailRemovedOnEntry
- Tag 41 is now required on OrderCancelReject message

V1.8

- Added the following CancelReason code:
    - InvalidClOrdId (21)
- Added the following CxlRejReason code:
    - InvalidClOrdId (130)

V1.8 Rev-B

- Added the following LastLiquidityIndType codes:
    - ImmediateMidpointRemoveOnEntry

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- RetailImmediateRemoveOnEntry

V1.8 Rev-C

- Added the following LastLiquidityIndType codes:
  - AddDisplayedPriceImprovement
  - AddHiddenPriceImprovement
  - RetailAddDisplayedPriceImprovement
  - RetailAddHiddenPriceImprovement

V1.9

- Added new tag 583 (LnkID) to the following messages:
  - OrderCancelReject
  - ExecutionReport – Pending New
  - ExecutionReport – New Order Acknowledge
  - ExecutionReport – Rejected Order
  - ExecutionReport – Trade
  - ExecutionReport – Pending Replace
  - ExecutionReport – Replaced
  - ExecutionReport – Pending Cancel
  - ExecutionReport – Canceled
  - ExecutionReport – Restatement
  - ExecutionReport – Trade Cancel/Correct
  - NewOrderSingle
  - OrderCancelReplaceRequest
- Added new CxlRejReason: 131 – InvalidLnkId
- Added new RejectReason: 179 – InvalidLnkId
- In the ExecutionReport - Restatement message, for tag 378, added the new ExecRestatementReason – 99 (Other)
- In the ExecutionReport - Restatement message, added custom tag 21022 ExtendedRestatementReason with the following values:
  - 0 - None
  - 1 - SetNBBO
  - 2 – JoinedNBBO
- Added information about LTSE validating the version specified in the Logon message and dropping the client connection if the version is not the expected version.
- Added information about when a new optional ExecutionReport - Restatement message will be sent.

V1.9 Rev-A

- Corrected typographical error in Section 6.3 – DefaultCstmAppVerID updated to reflect correct tag value 1408.

V1.9 Rev-B

- Added the following LastLiquidityIndType codes:
  - ImmediateMidpointRemoveOnEntry
  - RetailImmediateRemoveOnEntry

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V1.9 Rev-C

- Added SelfTradePrevention values to ExtendedRestatementReason

V1.9 Rev-D

- Added the following LastLiquidityIndType codes:
  - AddDisplayedPriceImprovement
  - AddHiddenPriceImprovement
  - RetailAddDisplayedPriceImprovement
  - RetailAddHiddenPriceImprovement

V1.10

- Updated values for the following tags to match the FIX standard:
  - Tag 103 – RejectReason

V1.10 Rev-A

- Corrected typographical error in Section 6.3 – DefaultCstmAppVerID updated to reflect correct tag value 1408.

V1.10 Rev-B

- Added the following LastLiquidityIndType codes:
  - ImmediateMidpointRemoveOnEntry
  - RetailImmediateRemoveOnEntry

V1.10 Rev-C

- Added SelfTradePrevention values to ExtendedRestatementReason

V1.10 Rev-D

- Added the following LastLiquidityIndType codes:
  - AddDisplayedPriceImprovement
  - AddHiddenPriceImprovement
  - RetailAddDisplayedPriceImprovement
  - RetailAddHiddenPriceImprovement

V1.11

- Added field to the ExecutionReport-Trade and Trade Cancel/Correct messages indicating the security's listing Tape.
  - Tag 1151 – SecurityGroup
- Updated description in NewOrderSingle message Tag 126 ExpireTime to indicate that expiration time will be set to the end of the LTSE post-market trading session if omitted.

V1.12

- Added TrdMatchId field (tag 880) to Trade Cancel/Correct messages

- Added LocateBroker field (tag 5700) to the following messages

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    - NewOrderSingle
    - ExecutionReport – Pending New
    - ExecutionReport – New Order Acknowledge
    - OrderCancelReplaceRequest
    - ExecutionReport – Pending Replace
    - ExecutionReport – Replaced

- Added the following RejectReason and CxlRejReason codes:
    - MissingLocateBroker
    - InvalidLocateBroker

V1.13

- Added onBehalfOfCompID (115) and DeliverToCompID (128) to the Standard Header
- Added NoPartyIDs (453) to the new order single and all execution reports
- Added TradeDate (75) to all execution reports
- Removed MPID (21007) from all messages
- Changed PartyRole (452) on all messages to Executing Firm(1)
- CustOrderCapacity (582) on NewOrderSingle is marked as conditionally required based on Market's rule set

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2.3 MEMO – SBE (v2.0)

V2.0a

- Corrected typographical error for Parties Group offset

V2.0

- Added ExecutionDetailsType (custom FIX tag 21038)
- Added Message Field Type – ExtendedExecInst (custom FIX tag 21041)
  - Added to NewOrderSingle message
  - Added to ExecutionReport_New
- Added InvalidExtendedExecInst to OrderRejectReasonCode (FIX tag 103)
- Added Message Field Type – AuctionId (custom FIX tag 21040)
  - Added to ExecutionReport_Trade, ExecutionReport_TradeCorrection, ExecutionReport_TradeBreak
- Added Message Field Type – AuctionType (custom FIX tag 21039)
  - Added to ExecutionReport_Trade, ExecutionReport_TradeCorrection, ExecutionReport_TradeBreak
- Added Auction value to Last Liquidity Ind (FIX tag 851)
- Removed ExecutionReport_PendingNew

2.4 MEMO – SBE (v1.0 to v1.12)

V1.1

- Removed the following Cancel Reason Codes:
  - ImmediateOrCancel = 2
  - FillOrKill = 3
- Edited to the LocateReq'd field description on New orders and Replace orders to include "and Short Sell Exempt"
- The Order Reject Reason Code MaxMsgThrottleRiskRuleBreach was renamed to MaxOrderRateRiskRuleBreach
- Added the following Order Reject Reason Codes: DailyMarketOrderGrossNotionalExposureRiskRuleBreach = 79
- DailyMarketOrderNetNotionalExposureRiskRuleBreach = 80
- Updated sample messages and hex dumps
- Added STP support to ExecutionReport_Restatement
- Changed Trade TransactTime type to UTCTimestampNanos
- Added MissingDispMethodType to OrderRejectReasonCode
- Added OrderInPendingState (replace) CancelReject code
- ExpireTime changed from UINT64 to UTCTimestampNanos (PendingNew and New messages)
- CancelReasonCode moved IOC and FOK as reasons

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V1.2

- Added description of UINT16 SBE version field, with an example that shows major/minor version packed into the field.
- Added the new LastLiquidityIndType of AddNbboJoin (value = 8)
- Added the following Cancel Reject Reason Codes:
  - 23 - BlockSessionRiskRuleViolated
  - 24 - BlockSellShortRiskRuleViolated
  - 25 - MaxSharesPerOrderRiskRuleBreach
  - 26 - NoNBBOAvailable
  - 27 - MaxNotionalValuePerOrderRiskRuleBreach
  - 28 - MaxADVPercentPerOrderRiskRuleBreach
  - 29 - PricePercentCollarRiskRuleViolated
  - 30 - PriceValueCollarRiskRuleViolated
  - 31 - HardToBorrowSecurityRiskRuleViolate
- Added the following Cancel Reason Codes:
  - 17 - FirmDisabled
  - 18 - MPIDDisabled
  - 19 - AccountDisabled
  - 20 - NotionalExposureRiskBreached
- Added the following Order Reject Reason Codes:
  - 82 - MissingFirmRiskSetting
  - 83 - InvalidAccountMPIDToFirm
  - 84 – InvalidPegOffsetValue

V1.3

- Added the following Cancel Reject Reason Codes:
  - 32 - InvalidSide
  - 33 - InvalidOrdType
- Added note in ExecutionReport_Restatement regarding the sending of the event when a SingleReprice order is re-displayed at its booking price

V1.4

- Updated CHAR encoding to show only printable ASCII value range to be consistent with office SBE Specifications
- Added new Liquidity codes to LastLiquidityIndType (FIX tag 851) for retail fills .
- Added RetailCustomer (value 5) to CustOrderCapacityType (FIX tag 582)

V1.5

- Clarification for the meaning of Null Value for DisplayMethod field
- Added InvalidDispMethodType to OrderRejectReasonCodes

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V1.6

- Added text indicating the Pending New execution report message is sent by default and may be disabled upon request.
- Added the following OrderRejectReasonCodes:
  - MissingCancelGroupId (value=86)
  - InvalidCancelGroupId (value=87)
  - MissingSTPGroupId (value=88)
  - InvalidSTPGroupId (value=89)
- Added the following MassCancelRejectReasonCode:
  - InvalidCancelGroupId (value=8)

V1.7

- Added new liquidity code:
  - 109 – RetailRemovedOnEntry
- Added the note: “The '*' - Indicates this is a LTSE value, it is not present in the standard FIX tag 851.” at the end of the LastLiquidityIndType (FIX tag 851) table.

V1.8

- Added new reject code to OrderRejectReasonCode:
  - InvalidClOrdId (value=90)
- Added new reject code to CancelRejectReasonCode:
  - InvalidClOrdId (value=34)
- Added new reject code to MassCancelRejectReasonCode:
  - InvalidClOrdId (value=9)
  - InvalidLowerPrice (value=10)
  - InvalidHigherPrice (value=11)

V1.8 Rev-B

- Added the following LastLiquidityIndType codes:
  - ImmediateMidpointRemoveOnEntry
  - RetailImmediateRemoveOnEntry

V1.8 Rev-C

- Added the following LastLiquidityIndType codes:
  - AddDisplayedPriceImprovement
  - AddHiddenPriceImprovement
  - RetailAddDisplayedPriceImprovement
  - RetailAddHiddenPriceImprovement

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V1.9

- Added new field LnkID (tag 583) to the following messages:
  - NewOrderSingle
  - OrderCancelReplaceRequest
  - ExecutionReport_PendingNew
  - ExecutionReport_New
  - ExecutionReport_Rejected
  - ExecutionReport_Trade
  - ExecutionReport_PendingCancel
  - ExecutionReport_Canceled
  - ExecutionReport_PendingReplace
  - ExecutionReport_Replaced
  - ExecutionReport_TradeCorrection
  - ExecutionReport_TradeBreak
  - ExecutionReport_Restatement
  - OrderCancelReject
- Added new OrderRejectReasonCode: InvalidLnkId - 91
- Added new CancelRejectReasonCode: InvalidLnkId - 35
- In the ExecutionReport_Restatement message, for the field ExecRestatementReason (tag 378), added the new ExecRestatementReason – 99 (Other)
- In the ExecutionReport_Restatement message, added new field ExtendedRestatementReason (custom tag 21022) with the following values:
  - 0 - None
  - 1 - SetNBBO
  - 2 – JoinedNBBO
- Added information about LTSE validating the version specified in the SBE header of each message and dropping the client connection if the version is not the expected version.
- Added information about when a new optional ExecutionReport - Restatement message will be sent.

V1.9 Rev-B

- Added the following LastLiquidityIndType codes:
  - ImmediateMidpointRemoveOnEntry
  - RetailImmediateRemoveOnEntry

V1.9 Rev-C

- Added SelfTradePrevention values to ExtendedRestatementReason

V1.9 Rev-D

- Added the following LastLiquidityIndType codes:
  - AddDisplayedPriceImprovement
  - AddHiddenPriceImprovement
  - RetailAddDisplayedPriceImprovement
  - RetailAddHiddenPriceImprovement

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V1.10

- Updated enumerated values for the following fields/tags to match MEMO FIX V1.10 specification values:
  - CancelRejectReasonCode (FIX tag 102)
  - CxlRejResponseToType (FIX tag 434)
  - DispMethodType (FIX tag 1084)
  - ExchangeCode (FIX tag 30)
  - ExecRestatementType (FIX tag 378)
  - LastLiquidityIndType (FIX tag 851)
  - OrdStatusType (FIX tag 39)
  - OrdType (FIX tag 40)
  - OrderCapacityType (FIX tag 528)
  - OrderRejectReasonCode (FIX tag 103)
  - PegType (FIX tag 1094)
  - RepriceFrequencyType (LTSE custom FIX tag 21020)
  - SelfTradePreventionType (LTSE custom FIX tag 21001)
  - SideType (FIX tag 54)
  - TimeInForceType (FIX tag 59)
- Updated the Encoding Examples in section 6.3

V1.10 Rev-B

- Added the following LastLiquidityIndType codes:
  - ImmediateMidpointRemoveOnEntry
  - RetailImmediateRemoveOnEntry

V1.10 Rev-C

- Corrected ExecRestatementType values in LastPx and LastShares descriptions
- Added SelfTradePrevention values to ExtendedRestatementReason

V1.10 Rev-D

- Added the following LastLiquidityIndType codes:
  - AddDisplayedPriceImprovement
  - AddHiddenPriceImprovement
  - RetailAddDisplayedPriceImprovement
  - RetailAddHiddenPriceImprovement

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V1.11

- Added field to the ExecutionReport Trade, Trade Correction and Trade Break messages indicating the security's listing Tape.
    - Tag 1151 - SecurityGroup
- Updated description in the NewOrderSingle message Tag 126 ExpireTime to indicate that expiration time will be set to the end of the LTSE post-market trading session if omitted.
- Updated Tag Ref Num in Mass Cancel Request, Mass Cancel Reject and Pending Mass Cancel messages from N/A:
    - LowerThanPrice – 21026
    - HigherThanPrice – 21027
    - RejectReason - 21028 (Mass Cancel Reject only)

V1.12

- Added LocateBroker field (tag 5700) to the following messages
    - NewOrderSingle
    - ExecutionReport_PendingNew
    - ExecutionReport_New
    - OrderCancelReplaceRequest
    - ExecutionReport_PendingReplace
    - ExecutionReport_Replaced

- Additional codes added to CancelRejectReasonCode and OrderRejectReasonCode:
    - MissingLocateBroker
    - InvalidLocateBroker

- Added information about message encoding: That MEMO SBE allows clients with word alignment restrictions, to supply up to 7 extra bytes after the content of the SBE message.

V1.13

- Added parties group(453) to NewOrderSingle and all execution reports
- Removed MPID(21007) from all messages
- Added NumGroups field to SBE header to specify repeating group count at the top level of the message.
- Changed LastMkt(30) on Trade ER to 4 character MIC
- CustOrderCapacity (582) and ExecInst (18) on NewOrderSingle is marked as conditionally required based on Market's rule set

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3 Market Data Specifications

3.1 MEMOIR Depth (v2.0 to 2.0a)

V2.0a

- Added Overnight value to TradingSessionType

V2.0

- Message Field Types
  - Added AuctionType
  - Added OrderFlagsType
  - Updated ReferenceBuyQuantity and ReferenceSellQuantity type from UINT32 to INT64 in AuctionStatus
  - Changed AuctionQuantity type from UINT32 to INT64 in AuctionTrade
  - Added HaltReasonType
- Messages
  - Added new messages
    - Auction Status
    - Auction Trade
    - Broken Auction Trade
    - Corrected Auction Trade
  - Added OrderFlagsType to Order Added message
  - Added HaltReason to Security Trading Status message
  - Removed Reserved and MPV fields from Instrument Directory message

3.2 MEMOIR Depth (v1.0 to v1.3a)

V1.1

- Updated Price Exponent field type from UINT8 to INT8
- Added TradingSessionStatus message to the list of messages sent during snapshot
- Updated Example messages and hex dumps
- Added 'X' = None to SecurityTradingStatusReasonType
- Renamed the Short Sale Restriction field in the Instrument Directory message, to Reserved
- Updated text/notes about Reg SHO and Security Trading Status messages
- Fixed Field Offsets in Instrument Directory message

V1.2

- Added description of UINT16 SBE version field, with an example that shows major/minor version packed into the field.

V1.3

- Updated the Snapshot section of the spec to include RegShoRestriction messages as well as reworded the InstrumentDirectory description under the same section.
- Corrected Instrument Directory BlockLength

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- Added BlockLength to Trading Session Status

V1.3a

- Added Overnight value to TradingSessionType

3.3 MEMOIR TOP (v2.0 to 2.0a)

V2.0a

- Added Overnight value to TradingSessionType

V2.0

- Message Field Types
  - Added AuctionType
  - Added BidFlagsType
  - Added OfferFlagsType
  - Changed AuctionQuantity type from UINT32 to INT64 in AuctionTrade
  - Added HaltReasonType
- Messages
  - Added new messages
    - Auction Trade
    - Broken Auction Trade
    - Corrected Auction Trade
  - Added BidFlagsType to Best Bid Offer, Best Bid, and Best Bid Short messages
  - Added OfferFlagsType to Best Bid Offer, Best Offer, and Best Offer Short messages
  - Added HaltReason to Security Trading Status message
  - Removed Reserved and MPV fields from Instrument Directory message

3.4 MEMOIR TOP (v1.0 to v1.3a)

V1.1

- Updated Price Exponent field type from UINT8 to INT8.
- Added TradingSessionStatus message to the list of messages sent during snapshot
- Updated sample messages and fixed typo in Price example text
- Added 'X' = None to the SecurityTradingStatusReasonType
- Updates text/notes related to Reg SHO and Security Trading Status messages.
- Updated Field Offsets in Instrument Directory message

V1.2

- Added description of UINT16 SBE version field, with an example that shows major/minor version packed into the field.

V1.3

- Fixed BestBidShort/BestOfferShort requirements to note that ‘size’ must be strictly *less than* 65535

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- Updated the Snapshot section of the spec to include RegShoRestriction messages as well as reworded the InstrumentDirectory description under the same section.
- Update snapshot section to clarify that any book update message types may be received during snapshot
- Corrected Instrument Directory BlockLength
- Added BlockLength to Trading Session Status

V1.3a
- Added Overnight value to TradingSessionType

3.5

3.6 MEMOIR Last Sale (v2.0 to v2.0a)

V2.0a
- Added Overnight value to TradingSessionType

V2.0
- Message Field Types
  - Added AuctionType
  - Added HaltReasonType
- Messages
  - Added new messages
    - Auction Trade
    - Broken Auction Trade
    - Corrected Auction Trade
  - Added HaltReason to Security Trading Status message
  - Removed Reserved and MPV fields from Instrument Directory message

3.7 MEMOIR Last Sale (v1.0 to v1.3a)

V1.1
- Updated Price Exponent field type from UINT8 to INT8
- Updated sample messages and hex dumps
- Added 'X' = None to SecurityTradingStatusReasonType
- Updated text/notes about Reg SHO and Security Trading Status messages.
- Fixed Field Offsets in Instrument Directory message

V1.2
- Added description of UINT16 SBE version field, with an example that shows major/minor version packed into the field.

V1.3
- Corrected Instrument Directory BlockLength
- Added BlockLength to Trading Session Status

V1.3a

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- Added Overnight value to TradingSessionType

3.8 MEMOIR Auction (v1.0)

V1.0

- Added new Market Data specification

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3.9 FIX DROP (v2.0)

V2.0

- Execution Reports
  - New Order Acknowledge – Added ExtendedExecInst
  - Trade
    - Added PriceImprovement (639), ExecutionDetails (21038), AuctionType (21039), and AuctionId (21040)
    - Updated LastLiquidityInd values
    - Updated CancelReason values
    - Removed PriceImprovement
  - Trade Cancel/Correct
    - Added AuctionType (21039) and AuctionId (21040)
    - Removed PriceImprovement
  - Rejected Order
    - Added InvalidExtendedExecInst
    - Added 115 - MissingExecInst value to OrdRejReason
    - Added 176 - InvalidDispMethodType to RejectReason
  - Canceled
    - Added 24 - NonCompliantRegShoPrice value to CancelReason
    - Renamed 12 - NonCompliantPrice to NonCompliantRegNmsPrice in CancelReason
  - Order Cancel Rejected – Added 0 - TooLateToCancel

3.10 FIX DROP (v1.0 to v1.12)

V1.1

- Added OrdType tag to ExecutionReports
- Added TrdMatchID (tag 880) to ExecutionReports and Trade Cancel/Correct
- Updated LastLiquidityInd values AddHidden, AddMidpoint, and AddNbboImprove from A, B, C to 51, 52, 53 respectively
- Removed incorrect reference to username and password

V1.2

- Added DefaultApplVerID tag in Logon message.
- Added Account (Tag 1), NoPartyIDs (Tag 453), PartyIDSource (Tag 447), PartyID (Tag 448), PartyRole (Tag 452) to ExecutionReports and Trade Cancel/Correct
- Added the following Execution Reports:
  - New Order Acknowledge
  - Rejected Order
  - Replaced
  - Canceled
  - Order Cancel Rejected
  - Restatement

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- Added the following custom CxlRejReason codes:
  - 119 - BlockSessionRiskRuleViolated
  - 120 - BlockSellShortRiskRuleViolated
  - 121 - MaxSharesPerOrderRiskRuleBreach
  - 122 - NoNBBOAvailable
  - 123 - MaxNotionalValuePerOrderRiskRuleBreach
  - 124 - MaxADVPercentPerOrderRiskRuleBreach
  - 125 - PricePercentCollarRiskRuleViolated
  - 126 - PriceValueCollarRiskRuleViolated
  - 127 - HardToBorrowSecurityRiskRuleViolate
- Added the following CancelReason codes:
  - 17 - FirmDisabled
  - 18 - MPIDDisabled
  - 19 - AccountDisabled
  - 20 - NotionalExposureRiskBreached
- Support HeartbeatInt value 0

V1.3

- Tag 1094 Use correct FIX name (PegPriceType)
- Added note in Restatement regarding the sending of the event when a SingleReprice order is re-displayed at its booking price

V1.4

- Added new Liquidity codes to LastLiquidityInd field (FIX tag 851) for retail fills.

V1.5

- Added ResetSeqNum (Tag 141) with clarification of behavior to Logon Message
- Account (Tag 1) changed to “not required” on all reports. Clients may opt-out of receiving this field, otherwise it will be present

V1.6

- Added new Reject Code:
  - 174 – InvalidExtendedExecInst
  - 175 – InvalidAccountMPIDToFirm
  - 176 – InvalidPegOffsetValue
  - 177 – MissingSTPGroupId
  - 178 – InvalidSTPGroupId
- Added new liquidity code:
  - 160 – RetailRemovedOnEntry
- Added new CxlRejReason codes:
  - 128 – InvalidSide
  - 129 – InvalidOrdType

V1.7 – V1.8

Fix DROP versions 1.7 and 1.8 were skipped to get the MEMO (SBE and FIX) versions and FIX DROP versions synched on version 1.9.

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V1.8 Rev-B

- Added the following LastLiquidityIndType codes:
  - ImmediateMidpointRemoveOnEntry
  - RetailImmediateRemoveOnEntry

V1.8 Rev-C

- Added the following LastLiquidityIndType codes:
  - AddDisplayedPriceImprovement
  - AddHiddenPriceImprovement
  - RetailAddDisplayedPriceImprovement
  - RetailAddHiddenPriceImprovement

V1.9

- Added mandatory field 1408 – DefaultCstmApplVerID to the Logon (MsgType 'A') message
- Added new tag 583 (LnkID) to all Application Messages From Exchange to Client
- Added new CxlRejReason: 130 – InvalidClOrdId
- Added new CxlRejReason: 131 – InvalidLnkId
- Added new RejectReason: 179 – InvalidLnkId
- In the Restatement message, for tag 378, added the new ExecRestatementReason – 99 (Other)
- In the Restatement message, added custom tag 21022 ExtendedRestatementReason with the following values:
  - 0 - None
  - 1 - SetNBBO
  - 2 – JoinedNBBO
- Added information about LTSE validating the version specified in the Logon message and dropping the client connection if the version is not the expected version.
- Added information about when a new optional ExecutionReport - Restatement message will be sent.

V1.9 Rev-B

- Added the following LastLiquidityIndType codes:
  - ImmediateMidpointRemoveOnEntry
  - RetailImmediateRemoveOnEntry

V1.9 Rev-C

- Added SelfTradePrevention values to ExtendedRestatementReason

V1.9 Rev-D

- Added the following LastLiquidityIndType codes:
  - AddDisplayedPriceImprovement
  - AddHiddenPriceImprovement
  - RetailAddDisplayedPriceImprovement
  - RetailAddHiddenPriceImprovement

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V1.10

- Updated values for the following tags to match the FIX standard:
  - Tag 103 – RejectReason
  - Tag 21004 – CancelReason

V1.10 Rev-B

- Added the following LastLiquidityIndType codes:
  - ImmediateMidpointRemoveOnEntry
  - RetailImmediateRemoveOnEntry

V1.10 Rev-C

- Added SelfTradePrevention values to ExtendedRestatementReason

V1.10 Rev-D

- Added the following LastLiquidityIndType codes:
  - AddDisplayedPriceImprovement
  - AddHiddenPriceImprovement
  - RetailAddDisplayedPriceImprovement
  - RetailAddHiddenPriceImprovement

V1.11

- Added field to the ExecutionReport Trade and Trade Cancel/Correct messages indicating the security's listing Tape.
  - Tag 1151 – SecurityGroup

V1.12

- Added OrderCapacity field (tag 528) to ExecutionReport - Trade message

- Added LocateBroker field (tag 5700) to the following messages
  - ExecutionReport – New Order Acknowledge
  - ExecutionReport – Rejected Order
  - ExecutionReport – Replaced
  - ExecutionReport – Order Cancel Rejected
  - ExecutionReport – Trade

- Added the following RejectReason and CxlRejReason codes:
  - MissingLocateBroker
  - InvalidLocateBroker

V1.13

- Added onBehalfOfCompID(115) and DeliverToCompID(128) to the Standard Header
- Added trade date(75) to all execution reports
- Changed party role(452) on all messages to Executing Firm(1)

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4 Specification Release Dates

Date	MEMX TCP	MEMX UPD	MEMO SBE	MEMO FIX	MEMO DROP	MEMOIR TOP	MEMOIR DEPTH	MEMOIR LAST SALE	MEMOIR Auction	FIX DROP
05/20/2020	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0		1.0
07/27/2020	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1		1.1
08/19/2020	1.1a	1.1	1.1	1.1a	1.1	1.1	1.1	1.1		1.1a
08/27/2020	1.1a	1.1	1.1	1.1a	1.1a	1.1	1.1	1.1		1.1a
09/23/2020	1.1a	1.1	1.2	1.2	1.2	1.1	1.1	1.1		1.2
10/09/2020	1.1a	1.1	1.3	1.3	1.3	1.1	1.1	1.1		1.3
11/23/2020	1.1a	1.1	1.4	1.4	1.4	1.2	1.2	1.2		1.4
02/10/2021	1.2	1.1	1.4	1.4	1.4	1.2	1.2	1.2		1.4
04/05/2021	1.2	1.1	1.5	1.5	1.5	1.3	1.3	1.3		1.5
07/12/2021	1.2	1.1	1.6	1.6	1.5	1.3	1.3	1.3		1.6
12/03/2021	1.2	1.1	1.7	1.7	1.6	1.3	1.3	1.3		1.7
02/10/2022	1.2	1.1	1.8	1.8	1.6	1.3	1.3	1.3		1.8
03/22/2022	1.2	1.1	1.9, 1.8	1.9, 1.8	1.9, 1.8	1.3	1.3	1.3		1.9, 1.8
04/22/2022	1.2	1.1	1.10 - 1.8	1.10 - 1.8	1.10 - 1.8	1.3	1.3	1.3		1.10 - 1.8
01/13/2023	1.2	1.1	1.11 - 1.8	1.11 - 1.8	1.11 - 1.8	1.3	1.3	1.3		1.11 - 1.8
02/28/2023	1.2	1.1	1.11, 1.10, 1.8	1.11, 1.10, 1.8	1.11, 1.10, 1.8	1.3	1.3	1.3		1.11, 1.10, 1.8
12/12/2023	1.2	1.1	1.12	1.12	1.12	1.3	1.3	1.3		1.12
04/30/2024	1.2	1.1	1.13	1.13	1.13	1.3	1.3	1.3		1.13
07/10/2026	1.2	1.1	2.0	2.0	2.0	2.0	2.0	2.0	1.0	2.0

Notes:

- With the specifications released on 3/22/2022 LTSE started supporting multiple MEMO (SBE, FIX) and DROP protocol versions.
- With the specifications released on 2/28/2023, LTSE has deprecated support for MEMO (SBE, FIX) and DROP protocol version 1.9.

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