

CME GROUP CUSTOMER FORUM

CME Group Specific Topics

July 2019

Agenda

1. CME Group-Specific Topics

- BrokerTec US Treasury Data on MDP
- NEX Data Now Available on CME DataMine
- iLink 3 FIX Binary
- iLink Tags
- Decommission of ITC functions
- Partnership Updates

BrokerTec US Treasury Data on MDP: Q3

CME Group will be distributing the NEX Data US Treasury data on MDP.

This feed includes Active, Once Old and Twice Old Benchmarks and is available to all *licensed* customers.

- Provides real-time comprehensive order book information, trade indicators and market statistics for Active US Treasury Benchmarks as well as indicative price levels for Once Old & Twice Old Benchmarks. Acts as a one-stop service for:



For more information, please contact the NEX Data Sales Team.

Technical specifications and launch timelines will be provided in a future CME Globex Notice update.

NEX Data Now Available on CME DataMine

BrokerTec Historical Data

- Available for six different maturities (2-yr, 3-yr, 5-yr, 7-yr, 10-yr, 30-yr) in three different formats (Top of Book, Depth of Book, and Full Order Book) dating back as far as 2000

GovPX Historical US Treasury Data

- Comprehensive historical tick market data coverage across a wide range of US Treasury and Agency markets

GovPX US Treasury End-of-Day

- End-of-Day pricing information for all active and off the run US Treasury issues

For more information, please see:

- BrokerTec: <https://datamine.cmegroup.com/#t=p&p=cme.nexBrokerTec>
- GovPX: <https://datamine.cmegroup.com/#t=p&p=cme.govPx>
- GovPX EOD: <https://datamine.cmegroup.com/#t=p&p=cme.govPxEod>

Third Party Data via CME DataMine

Six external party historical datasets are now available via the CME DataMine self-service platform:

- **Bantix** - Implied volatility curves
- **Orbital Insight** - Geospatial crude supply estimates
- **RS Metrics** - Satellite imagery global copper estimates
- **Tellus Labs** - Crop estimates
- **1Qbit** - Options and futures price sentiment meter
- **Johannesburg Stock Exchange** - Equity and Currency Derivatives

<https://www.cmegroup.com/datamine>

iLink 3: FIX Binary Order Entry

Overview

New state-of-the-art order entry protocol

FIX Simple Binary Encoding (SBE)

FIX Performance (FIXP) session management



Designed to optimize order entry on the CME Globex platform for futures, options, BrokerTec and EBS markets

iLink 3: FIX Binary Order Entry

Benefits

More efficient iLink FIX messaging

- Simple Binary Encoding (SBE) delivers faster encoding/decoding
- Lean messages move administrative information out of order entry business message

Fixed message sizes

- Access to all iLink functionality with no performance impact
- More deterministic performance for all customers

Simplified recovery modes via FIXP session management

- Messages may or may not be recovered by retransmission
- Recoverable: If client system detect a gap, then missed messages can be recovered by retransmission
- Idempotent: If CME Globex detects a gap, the client is notified by CME Globex, but recovery is under control of the client
- Session-level information (e.g. headers) no longer required

Consistent encoding method for market data and order entry

- XML schema and templates for order entry just like MDP 3

iLink 3: FIX Binary Order Entry

Only MSGW sessions will support iLink 3

- iLink 3 and iLink 2.x will be available in parallel for MSGW sessions for 6 months

Only iLink 3 will support access to BrokerTec and EBS markets

- CGW customers must migrate to MSGW+iLink 3 to access the full complement of CME Globex markets

Drop Copy will support both iLink 3 and iLink 2.x source sessions

- All Drop Copy message payloads will match current formats and encoding to reduce the work for Drop Copy consumers.

iLink 3: Business Messages

Ability to pre-register administrative information

- CME Group will launch the new Service Gateway for customers to register administrative information out-of-band
 - Customers login using the same MSGW session and FIXP protocol
 - Support only Party Detail Definition messages
- ILink 3 allows customers a choice to optimize their message construction by removing Administrative information from the order entry path
- Administrative information includes:
 - Account, Account Type, SenderComp, CTI Code and Self-Match Prevention
- **For most efficient order messages:** customers may pre-register administrative information in the new Service Gateway weekly and omit from order entry by using a tag to reference the registered information
 - Pre-registration information is submitted via iLink 3 to the new, out-of-band Service Gateway
- **For easiest messaging flow:** send the administrative information to MSGW before each business message (new order, order modify, etc)
- Drop Copy messages will have full details of both the administrative and business information

iLink 3: FIX Binary Order Entry

MSGW Session Migration

Customer self-service session ID migration from iLink 2.x to iLink 3 through CME Request Center

- Customers with HMAC key administration rights can migrate sessions from iLink 2.x to iLink 3 on a session-by-session basis
- No new sessions required for trading futures and options
- Changes effected once a week on Sunday startup
- Sessions cannot fall back to iLink 2.x mid-week – Manage your migration!
- All MSGW sessions must be migrated to iLink 3 by the end of the parallel period

iLink 3 Timeline

Q3 2019			Q4 2019			Q1 2020			Q2 2020			Q3 2020			Q4 2020		
Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<p>◆</p> <p>Late July 2019</p> <ul style="list-style-type: none"> Client Impact Assessment with message specifications available Message specifications will support CMEG and BTEC markets 															<p style="text-align: center;">iLink 2.x Decommissioned on all MSGWs</p>		
<p>◆</p> <p>August 2019</p> <ul style="list-style-type: none"> New Release for futures and options Subset of functionality <ul style="list-style-type: none"> FIXP Administrative Registration Order/Modify/Cancel 			<p>◆</p> <p>November 2019</p> <ul style="list-style-type: none"> AutoCert+ certification for futures and options <ul style="list-style-type: none"> Required for clients who want to support iLink 3 New Release for BTEC plus all remaining functionality <ul style="list-style-type: none"> Retransmission, Mass Quotes, RFC, RFQ, Administrative In-Message Formats 			<p>◆</p> <p>March 2020</p> <ul style="list-style-type: none"> Production Parallel for futures and options <ul style="list-style-type: none"> CME Request Center for session migration self-service AutoCert+ certification for BTEC 											

iLink Tags: Tag 1031-CustOrderHandling

- Collaboration with FIA to provide trading and clearing firms a more effective means to reconcile executing broker fees
- Tag 1031 will be validated for presence and values on all iLink business messages
 - W - Desk
 - Y - Electronic
 - C - Vendor-provided platform
 - G – Sponsored Access via Exchange API
 - H – Premium Algo Trading Provider
 - D – Others
- iLink messages without 1031 or with an invalid value will be rejected
- Validation Launch:
 - FIA white paper available now!
 - NR – August 26, 2019
 - Production – November 17, 2019

Recently Launched iLink Tags

End-to-End Note Field

FIX tag 5149-Memo

Allows front-end or trading customer to pass instructions or information directly to middle and back offices, including your FCM.

Available now!

Clearing Instructions

New FIX tags for post trade clearing instructions on customer orders:

Tags 819: AvgPxIndicator

Tag 1731: AvgPxGroupID

Tag 1598:

ClearingTradePriceType

- Both methods are currently supported
- Special characters in tag 1 will be deprecated in the future
- Migrate now to the new explicit FIX tags!

Market Segment Gateway Enhancements

To further safeguard CME Globex infrastructure, the following changes to **MSGW** launch in Q1 2020

- Sessions that send a network packet with an incomplete message will be subject to additional processing
 - This processing takes at least 3 microseconds before the message(s) can be sent to the trading engine
- The number of messages the gateway can hold for a session is undergoing additional processing is fixed
 - If a session exceeds the permitted number of messages, the session will be logged out and all in-flight messages will be rejected.
- iLink messages impacted by this enhancement will be flagged in the corresponding Acknowledgement sent from CME Globex.
- *As a reminder, CME Group Rulebooks prohibit any customer behavior that may cause an operational risk to markets in Rule 575*
- **Messaging Impacts**
 - New FIX tags returned on iLink outbound messages
 - Tag 9553-SplitMsg to identify the reason for the additional processing
 - Tag 5904-DelayDuration to identify the duration
 - New Logout Reason when MSGW session is logged out due to the number of in-flight messages
- **Launch Timeline**
 - New Release: Monday, November 4, 2019
 - No certification required
 - Production: Phased rollout starting January 26 – March 8

Decommission of Globex ITC Functions

Project Overview

- With the introduction of Streamlined Settlement & Valuation channel and Reference Data API, many non-floor ITC data functions are now redundant and will be decommissioned in favor of a modern SBE architecture
- Additionally, unlike ITC, the Streamlined Settlement & Valuation channel will support price decimals beyond 7 digits
- Floor data will continue to be disseminated on ITC
- **Timelines**
 - Technical specifications: Available
 - Production decommission of ITC functions: **November 22, 2019**

Partnership Updates

Financial & Energy Exchange Ltd. (FEX) Australia

CME Group Clearinghouse will provide clearing for FEX Asian Crude, Australian Power and other energy products the second half of 2019. NYMEX members may apply for FEX Clearing; for more information on membership please contact FEX at onboarding@fex.com.au

Eris Innovations

Dec. 2nd, 2018, Eris Standard Swap tenors 2-30 years migrated from Eris SwapBook to CME Globex under CBOT Designated Contract Market.

- Eris Swap Futures set a new monthly volume record of 181,442 contracts in the first 9 trading days of June, surpassing the previous record of 173,330 set in March.
- Since launch, daily ADV 6,856, front-months Open Interest 59,442 (Sept and Dec) and total Eris Swap Futures Open Interest 198,722.