

EBS Market on CME Globex Market Functionality

This topic describes the new market functionality for EBS Market's central limit order book and eFix Matching Services integration onto the CME Globex platform. Subject to applicable regulatory approvals, all [Products](#) will be integrated onto the CME Globex platform. This integration will be a hard cut-over from the EBS Market platform to CME Group architecture and services.

This document presents the new behavior and concepts introduced for EBS on CME Globex. For full technical information, see the [CME Globex platform topic](#).

CME Globex Services Schedules for EBS Market and eFix

Clients can connect and begin logging in to CME Group services starting 10:00 a.m. Central time (CT) Sundays, before the first market open.

Clients must logout and disconnect from all services at 5:00 p.m. CT on Fridays, after the last market close for the week.

CME Group internal testing in the Production environment can occur during the weekend. Any trades or market data generated during these tests should be disregarded.

Getting Started with CME Group Services

This section provides an overview of current CME Group services that will be used for EBS Market including eFix Matching on CME Globex. If you are new to CME Group services or wish to better understand how your current system aligns with upcoming EBS functionality, CME Group recommends starting here.

Service	Description
iLink 3	Order entry and management service
MDP 3	Market data solutions
Drop Copy	Risk management API with real-time copies of orders and trades on CME Globex
Reference Data API	Web service API for comprehensive product and instrument parameters and definitions

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Revision History

Date	Description
May 4, 2022	Added "Institutional Prioritization Match Algorithm" section.
March 1, 2022	<ul style="list-style-type: none">• Added "SMP Features by Access Method" section.
September 30, 2021	<ul style="list-style-type: none">• EBS Product Overview - Added "Product Inventory" section.

June 2, 2021	<ul style="list-style-type: none"> • EBS Product Overview - Rewrote entire page. • Rewrote "EBS Market on CME Globex Services" • "Market Integrity Controls" <ul style="list-style-type: none"> • Added Cancel on Conclusion. • Added link to Cancel on Disconnect. • Removed "Cancel on Disconnect" section. 															
December 15, 2020	"Regional Deployments for EBS Market and eFix Matching" - Correction to table. <table border="1" data-bbox="354 422 1247 659"> <thead> <tr> <th>PRODUCTS</th> <th>PRIMARY REGION</th> <th>BACKUP REGION</th> </tr> </thead> <tbody> <tr> <td>New York FX Spot</td> <td>Equinix Secaucus NY5 Slough LD4.2</td> <td>Equinix Slough LD4.2 Secaucus NY5</td> </tr> <tr> <td>New York Metals</td> <td></td> <td></td> </tr> <tr> <td>London FX Spot</td> <td>Equinix Slough LD4.2 Secaucus NY5</td> <td>Equinix Secaucus NY5 Slough LD4.2</td> </tr> <tr> <td>London NDFs</td> <td></td> <td></td> </tr> </tbody> </table>	PRODUCTS	PRIMARY REGION	BACKUP REGION	New York FX Spot	Equinix Secaucus NY5 Slough LD4.2	Equinix Slough LD4.2 Secaucus NY5	New York Metals			London FX Spot	Equinix Slough LD4.2 Secaucus NY5	Equinix Secaucus NY5 Slough LD4.2	London NDFs		
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December 3, 2020	Initial Publication															

Key Events and Dates

See the full [New Release and Production launch schedule](#).

Testing and Certification

Functional certification via the AutoCert+ tool is mandatory for client systems accessing the following CME Group API services for EBS:

- iLink 3 for Convenience Gateways (CGW)
- iLink 3 for Market Segment Gateways (MSGW)
- Drop Copy
- MDP 3 services

Future Topics

Additional information on the following topics will be available soon:

- Institution Groups for
 - Latency Floor
 - Minimum Quote Life
 - eFix matching

EBS Market on CME Globex Services

The full list of client services for EBS Market and eFix Matching Service on CME Globex is available [here](#).

Regional Deployments for EBS Market and eFix Matching

EBS Market and eFix Matching products will trade in one of two distinct regions. Shared Services will be available in the Chicago DC3 data center.

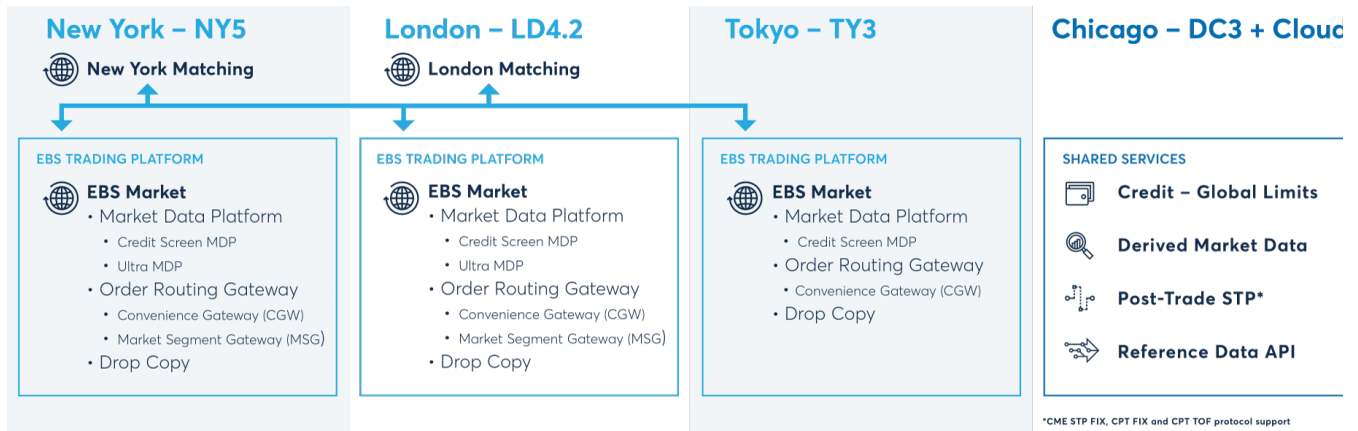
Each product is available for trading in a single location.

Shared Services includes Global Credit Limits, Data Insights Spectrum market data and EBS CPT post-trade service.

Products	Primary Region	Backup Region	Trading Engine	MSGW	CGW	MDP 3	Drop Copy	Shared Services
New York FX Spot	Equinix Secaucus NY5	Equinix Slough LD4.2	✓	✓	✓	✓	✓	✗
New York Metals								
London FX Spot	Equinix Slough LD4.2	Equinix Secaucus NY5	✓	✓	✓	✓	✓	✗
London NDFs								
None	Tokyo TY3	N/A	✗	✗	✓	Conflated TCP Credit Screened only	✓	✗

None	Chicago DC3	New York - Vesey	✗	✗	✗	Data Insights Spectrum only	✗	✓
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The trading engines, MSGWs, CGWs, Market Data services and Drop Copy Gateways will be physically located in the Primary Region for production and the Backup Region for Disaster Recovery.



Products

EBS products that are in-scope for the integration to CME Globex, and additional information is available in the [EBS Product Overview](#) topic.

i eFix Matching instruments will be available as distinct Products and Instruments. Clients who want to trade these markets must enter orders on the specific instruments. The eFix Matching market data messages will be separate from the Spot and NDF instruments.

New and Modified Market Functionality

Functionality	New to CME Globex	Modified from Existing CME Globex	New York Spot FX London Spot FX	New York Metals	eFix Matching	London NDFs
eFix Matching Products, including Trade Restatements	✓	✗	✓	✓	✓	✗
24-hour trading day; trade date roll during Open market state	✓	✗	✓	✓	✗	✓
Order Cancel and Order Cancel/Replace by ClOrdID	✓	✗	✓			
Pip Discretion	✓	✗				
Latency Floor	✓	✗				
Minimum Quote Life and Minimum Quote Life Protection	✓	✗				
Good for Session order duration	✓	✗				
Iceberg Orders Features	✗	✓				
Notional Quantity Order and Trade Size	✓	✗				
CME Globex-style In-Flight Mitigation	✗	✗				
CME Globex-style Self-Match Prevention with Trade-Around	✗	✓				
Settlement Counterparty and Prime Broker Masking	✓	✗				
CME Globex-style Cancel on Disconnect	✗	✗				

Notional Quantity

EBS instruments on CME Globex will trade in Notional Quantity terms. Order entry via iLink 3, all market data, and Product and Instrument records on Reference Data API v2 will all reflect notional terms for all quantity fields and attributes. All other instruments on CME Globex use contract or lot terms.

Detailed information on the Notional Quantity handling for each API is available in the Client Impact Assessments for each interface.

Self-Match Prevention

For EBS Market and eFix Matching, the [CME Globex-style Self-Match Prevention](#) will be supported with the following changes:

- SMP IDs
 - GFIDs may register for as many SMP IDs as desired
 - SMP IDs may be shared across GFIDs only if the GFIDs are part of the same Institutional Group
- SMP Instructions are not supported
- In the event of a self-match event, the arriving order will trade around any resting order(s) with the same SMP ID.
 - If arriving order is a Good For Session order, and does not fully trade, the remaining quantity will rest on the book at the same or better price level as the resting order(s). Market data will reflect the crossed book.

SMP Features by Access Method

Order Entry	Registration for SMP IDs	Application Level	Effect
iLink 3	<ul style="list-style-type: none"> • Clients can register for as many SMP ID(s) as needed. • Each SMP ID must be associated to a single GFID. • Orders for any GUS under that GFID may use any SMP ID. 	Clients must submit a valid ID, registered to their GFID, on each individual order. Technical Specification	If two orders with the same SMP ID would match, the arriving order will trade around any resting order(s) with the same SMP ID. Any remaining quantity will rest on the book at the same price level as the resting order(s).
EBS Ai for CME Globex	<ul style="list-style-type: none"> • Clients can register for a single SMP ID per GFID. • Clients can associate their SMP ID to any GUS' under their GFID. • All orders for the GUS will be assigned the associated SMP ID. • If no SMP ID is registered for a GUS, SMP will not be applied to any orders submitted under that GUS. 	CME Group will apply the SMP ID associated to the order's GUS (if any). The SMP ID cannot be submitted by the client and will not be visible on any API messaging.	If GUS has an SMP ID defined: Self-match will be prevented as designed.
Workstation		CME Group will apply the SMP ID associated to the order's GUS (if any). The SMP ID cannot be submitted by the client and will not be visible on any Workstation screen.	If GUS does not have an SMP ID defined: Orders from the same GUS and from the same GFID will be allowed to trade.

In-Flight Mitigation

EBS Market and eFix Matching will leverage CME Globex-style In-Flight Mitigation upon the migration to CME Globex.

In-flight mitigation (IFM) is an optional feature on CME Globex that allows client systems submitting cancel/replace messages to prevent overfilling in the event that the original order is filled while the cancel/replace message is being processed.

For example, with IFM enabled, if an order for 10 is filled for 2 prior to being replaced with an order for 5, the new order on the book will only be for 3. With IFM disabled, the new order will go on the book as 5.

CME Globex customers who want to use the IFM Cancel/Replace functionality must explicitly indicate their choice in the first Cancel/Replace messages by including Tag 9768=Y.

See full details and a video on [CME Globex-style IFM](#).


Market Integrity Controls

The following Market Integrity Controls will be supported for EBS Market and eFix Matching on CME Globex:

- [Automated port closure](#)
- [Messaging controls \(rolling 3 seconds\)](#)
- [Cancel on Disconnect](#)
- [Cancel on Conclusion](#)
- Maximum and Minimum Order Sizes
- [Kill Switch](#)
- [Price Banding](#)

Institutional Prioritization Match Algorithm

The Institutional Prioritization algorithm is a two allocation FIFO algorithm that provides matching priority to Globex Firm IDs (GFIDs) in the same Institution Group. The first FIFO allocation fills the Institutional Group the aggressing order is associated with. The second pass allocation matches orders without an Institutional Group association. The Institutional Prioritization algorithm uses time as the only criteria for filling an order for each FIFO pass. An order loses order priority and is re-queued if the order modified with an increase in quantity. The Institutional Prioritization Algorithm is denoted on the MDP Security Definition Message (35=d) via tag 1142-MatchAlgorithm=V .

 Information regarding other match algorithms on Globex can be found [here](#).

Institutional Prioritization Example

In the example below, an aggressing bid order first fills offer orders within the same Institution Group. In the second allocation, the remaining aggressor bid quantity fills orders that are not within the Institution Group.

Orders in the Market

ORDER NO.	BID QTY	BID Institution Group	OFFER QTY	OFFER GFID	ORDER NO.
INCOMING	20	BB3	10	AAA	1
			5	BB1	2
			5	CCC	3
			8	BB2	4
			10	DDD	5

Allocation 1 - Institution Group Fills

For the first allocation, the orders with the same Institution Group (BB1 & BB2) as the aggressor (BB3) are filled.

ORDER NO.	BID QTY	BID Institution Group	OFFER QTY	OFFER GFID	ORDER NO.
INCOMING	7	BB3	10	AAA	1
			5	CCC	2
			10	DDD	3

Allocation 2 - Resulting Orders in the Market

Next, the offer for AAA, which is not part of the aggressor Institution Group, is reduced from 10 to 3.

OFFER QTY	OFFER GFID	ORDER NO.
3	AAA	1
5	CCC	2
10	DDD	3