

RatesMatchSM

Trading Platform User Guide

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1. Introduction

GFI Swaps Exchange LLC (the “Company”) is a swap execution facility that allows market participants to trade a variety of swaps.

The Company’s RatesMatch trading platform (“RatesMatch” or the “Platform”) is a system for the trading of interest rate swaps that combines the Company’s request for quote (“RFQ”) functionality with a fully anonymous central limit order book that operates in a low-latency trading environment. RatesMatch enables buy-side and sell-side financial institutions and other market participants to trade, manage risks associated with price volatility, and diversify their assets. To accomplish this, RatesMatch offers market participants the ability to submit RFQs and utilize a variety of order types to transact in outright contracts on a central limit order book. RatesMatch also provides participants the ability to trade complex spread orders by implying prices across various points in the yield curve.

The Platform is easily accessible through an open access Java-based platform that also allows participants to place orders using a graphical user interface, an industry standard FIX API or through independent software vendors (including ION, Trading Technologies or others). Additionally, RatesMatch allows customers to customize their view and have full control over their orders while maintaining a fully anonymous environment.

The Platform provides a comprehensive swap data reporting solution and reports all trades to the appropriate swap data repository. Additionally, the platform utilizes a dedicated server to transmit detailed transaction information to National Futures Association, the Company’s Regulatory Services Provider so that compliance and surveillance functions may be conducted.

This document outlines the various functionalities of the RatesMatch platform. Please be advised that the functionalities described in this document are subject to applicable provisions of the Commodity Exchange Act, regulations of the Commodity Futures Trading Commission (the “CFTC”) and rules of the Company and the relevant DCO. If you have any further questions please use the contact information below:

RATESMATCH HELPDESK
Phone: +1 212.968.2915
Email: support@ratesmatch.com

2. Accessing RatesMatch

RatesMatch offers a variety of methods for interacting with the electronic trading platform. Users may download the Java based platform at <https://www.ratesmatch.com>. In addition to the RatesMatch Java based platform, RatesMatch has developed a two-way low latency application programming interface (API) utilizing the Financial Information eXchange (FIX) Protocol 4.4. This method of accessibility allows traders the opportunity to interact with the platform by using their proprietary systems.

2.1 FIX API

Information concerning the FIX API can be found in the supplemental RatesMatch FIX Protocol Specification for those users who have entered into a Direct Access Development Agreement.

2.2 Clearing

Certain swaps traded on the Company are subject to mandatory clearing requirements under CFTC Regulations. A client that is not a clearing member of the applicable DCO must establish arrangements for its trades to be cleared by a clearing member.

2.3 Logging In & Out of RatesMatch

1. Launch RatesMatch Java version (<https://clientratesmatch.gfigroup.com>) and log in using your username and password (Figure 2.1).

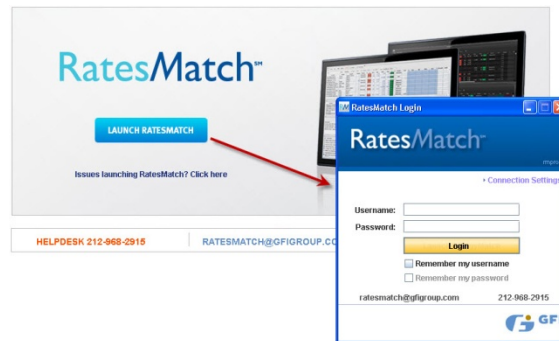



Figure 2.1

2. To log out, click  Logout under Connection in the upper left-hand corner of the RatesMatch screen.
3. If you try to sign out while you still have live orders on-screen, the system will prompt the user to respond to the following: *“What would you like to do with any live orders you may have?”* The choices are: **Hold All**, **Keep Orders Live**, or **Cancel Sign Out** (Figure 2.2).

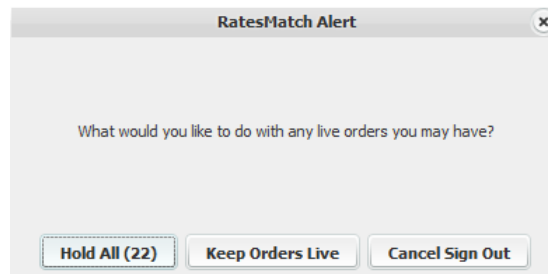


Figure 2.2

4. When logging out without having orders on the screen, the system asks the user, *“Are you sure you want to sign out?”* Responses include **Sign Out**, which automatically times out your session after 30 seconds, and **Cancel Sign Out**.

2.4 User IDs/Logins

RatesMatch requires a username and password to access the screen. Usernames and passwords may be obtained by contacting customer support at (212) 968-2915, or by sending an email to ratesmatch@gfigroup.com. Accounts are issued on a per user basis, usually with the requester’s email

address as the username and a standard password. First-time users are prompted to change their password upon initial login.

2.5 Participants

RatesMatch users vary by role and permission (described below):

- 1. Client/Trader:**¹ Can view prices posted by others and manage their own prices.
 - **Permission Types**
 - *View Only, Voice Trade Owner, Trade Owner:* To clients, these permission levels allow them to view orders placed on-screen.
 - *Interactive:* In addition to the above permission, clients receive full access to RatesMatch's trading functionalities.
- 2. Credit Administrator:** Can access the credit matrix, and extend and remove customer credit.
- 3. FIX API Users:** Can access the platform via ports 1080 and 443. The actual user accounts are limited by the permission types set for clients/traders.
- 4. Brokers and Agent of RatesMatch:** Can view, post, and transact on orders per permission type.
 - **Permission Types**
 - *View Only:* Can view the client list and orders.
 - *Voice Trade:* In addition to the above permission, brokers and clerks may log transactions brokered over the voice system and may view the tradebook.
 - *Interactive:* In addition to the above permission, brokers receive full access to RatesMatch's trading functionalities on behalf of clients.

2.6 Requirements for System Use and Authorization to Trade

All participants must agree to the Terms of Use before gaining access by the "click-through" agreement.

3. Orders

3.1 Order Management

Orders may be entered by traders, dealers on behalf of other accounts, or by brokers on a trader's behalf. Resting orders can be submitted via the New Order Entry Dialog (Figure 3.1) or directly into the grid (Figure 3.2).

¹ The term "Client" is used in this User Guide to reference Company Participants, Sponsored Access Firms and Registered Traders. See the Company Rulebook for further information.

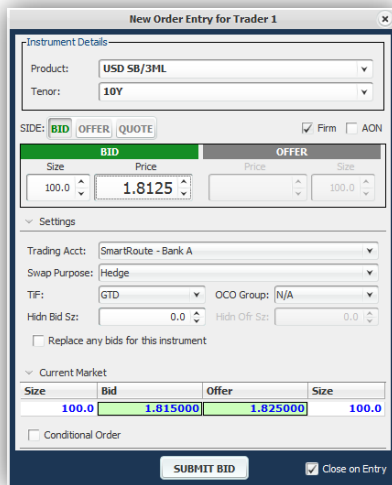


Figure 3.1: New Order Entry Dialog

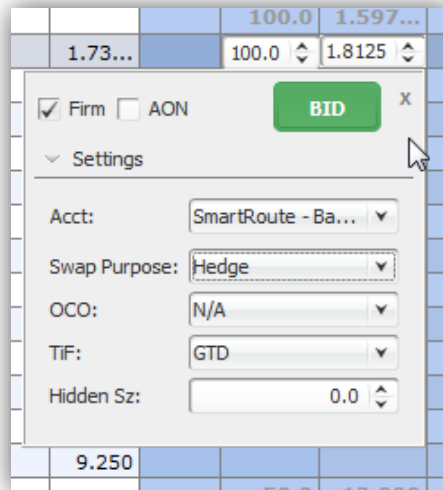


Figure 3.2: In-Grid Editor

3.2 Order Type Attributes

All order types have the following attributes:

Order Attribute	Description
Transaction ID	ID associated to order
Instrument ID	ID associated to the contract
Side	bid or offer
Price	order price
Size	order quantity
Trader ID	ID of trader
Legal Entity ID	ID of trader's legal entity
Sponsoring Firm ID	ID of dealer acting on behalf of other accounts
Entered by ID	user ID of last update
Brokerage ID	ID of specified brokerage firm
Execution Path ID	ID of execution path (bilateral or specific clearing venue)
Firm/Held Status	firm (executable on screen) or held (user has taken the order out of the market but has not deleted it; used to quickly re-firm the order to the market)
Market Timestamp	timestamp of order submission or last update to price, size, and/or brokerage of existing order
Last Updated Timestamp	timestamp of the last update to any field on the order

Figure 3.3: Order Type Attribute Descriptions

3.3 Order Types Supported

The following order types are supported:

Order Type	Description
Limit	bid or offer order submitted into the market (Figure 3.5- A)
All or None (AON)	limit order where only the entire submitted size is available for execution (i.e. no partial fill is

	allowed) (Figure 3.5- B)
Time in Force (TiF)	limit order which will be held within a specified time frame; all orders are held at end trading session (Figure 3.5- C)
Hidden Size (Reserve Size)	limit order which is comprised of two components, a shown size and a hidden size; shown size is a standard limit order; hidden size is submitted as a new limit order when the initial shown size is fully executed (Figure 3.5- D)
Work the Balance	order submitted via hit/lift dialog where it directly executes an existing resting order and remaining size is placed as a resting limit order (Figure 3.6- A)
Fill and Kill	order submitted via hit/lift dialog where it directly executes an existing resting order and remaining size canceled (Figure 3.6- B)
Fill or Kill	order submitted via hit/lift dialog where it directly executes an existing resting order; if full size of submitted order is not meet, the order is canceled (Figure 3.6- C)
Voice Trade	trade executed over phone by a broker and entered through the Voice Trade dialog (not available for traders)

Figure 3.4: Descriptions of Supported Order Options

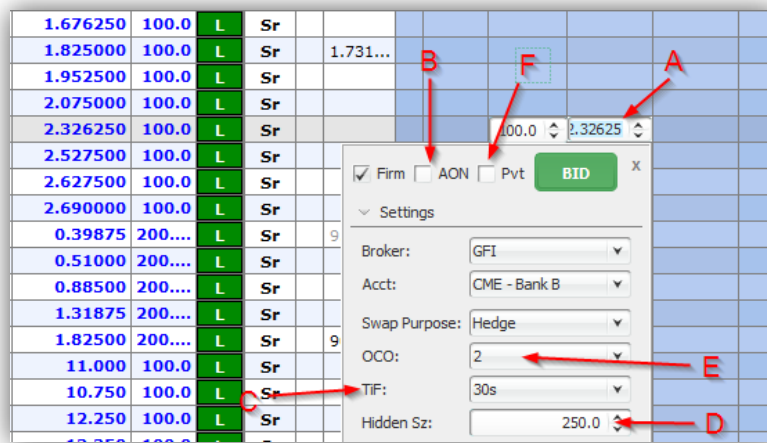


Figure 3.5: In-Grid Editor Options Referenced in Figure 3.4

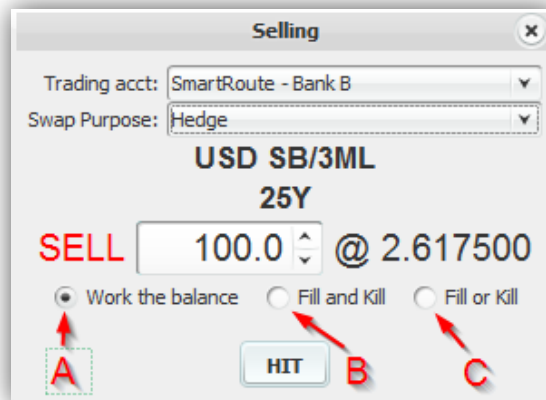


Figure 3.6: Hit Order Dialog Box Referenced in Figure 3.4

3.4 Strategies

Various trading strategies can be implemented on RatesMatch. Figure 3.7 provides a description of each.

Strategy	Description
Outright	One product with one period
Calendar Spread	One product with two periods (e.g., 5Y/10Y USD SB/3ML)
Butterfly Spread	One product with three periods (e.g., 10Y/12Y/15Y USD SB/3ML)
Product Spread	Two products with one period

Figure 3.7: Trading Strategies Implemented in RatesMatch

3.5 Market Makers

Market makers provide liquidity to the markets offered in RatesMatch by posting orders through the curve from spot month to longer term periods. They can manage orders through the graphical user interface (“GUI”) or through RatesMatch’s FIX API to download market data, uplink orders, and receive drop-copies (refer to the RatesMatch FIX Gateway Protocol Specification Guide for details).

3.6 Indication of Interest (IOI)

RatesMatch supports a transparent IOI process on select product sets (Figures 3.8). Traders can send an anonymous IOI to all brokers and traders (Figure 3.9). All IOI responses are sent as standard limit orders visible to the entire market.

Swap	USD SB/3ML	11Y													
Swap	USD SB/3ML	12Y													
Swap	USD SB/3ML	15Y								Sr	H	100.0	2.316250		
Swap	USD SB/3ML	20Y													
Swap	USD SB/3ML	25Y								Sr	H	100.0	2.617500		
Swap	USD SB/3ML	30Y								Sr	H	100.0	2.680000		
Futures	USD SB/3ML Eri...	2Y								Sr	H	200....	0.38875		

Figure 3.8: IOI Workspace Option

Type	Product	Tenor	Reg. Enti...	Depth	Broker	X	Clr	H	Size	Bid	Offer	Size	L	Clr	X	Broker	Last
Swap	USD SB/3ML	12Y								2.075...	100.0		L	Sr		GFI	2.06...

Figure 3.9: IOI Resulting in an Order

3.7 Request for Quote (RFQ)

Interest rates swaps trade on a vast amount of outright, spreads, and butterflies, making it impossible to maintain all possible combinations of contracts in the system at any given time. Therefore, the Company allows users to create these contracts and survey market levels using RFQs. All RFQs are currently effected through voice trading.

The Company anticipates offering RFQ functionality that is fully automated in the near future. Such automated RFQ functionality will enable traders to contact select market makers to generate tradable levels

for the requested contracts. During the timed process, market makers can return bids, offers, or both. A trade occurs when requesters and market makers agree on a price level.

3.8 Order Matching/Execution

3.8.1 Depth Queue

Orders are ranked in the depth queue by price/time priority. Bids are first queued by ascending price level, and offers by descending price level. Bids and offers at each price level are then queued in terms of the oldest orders at the top and newest orders at the bottom of the depth queue.

3.8.2 Execution

An order submitted with a price that is equal to or crosses the existing resting order(s) will match in accordance with the corresponding contra-side with the first price/time priority and credit validation rules.

3.9 Joint-the-Trade (JTT)

For certain swaps, executed trades that are posted to the market activity window of the Platform may trigger a Join the Trade session during which prices in the stack at the same level are auto-joined in this session. During such a session, the counterparties to the trade may have a short exclusivity period in which to work-up the size of the original trade, with other Participants then being invited to join the trade. The operation of the order book may or may not be suspended with respect to a swap that is subject to a join the trade session, but any pre-existing orders in the order book that are equal to or better than the price of a triggering transaction will be automatically included in the join the trade session. JTT orders are anonymous to other market participants, and a JTT session will run for a preset period of time based on the product configuration, and unfilled orders at the end of the session will remain in the order book until expiration or cancellation.

4. Trading

4.1 Hours of Operation

RatesMatch is open for trading Monday through Friday from 7:00 a.m. ET to 5:30 p.m. ET for the majority of markets.

4.2 Trade Controls

The system imposes price and size limits at the product level where limits vary by product to prevent erroneous trade entries. When limits are exceeded, users are informed via pop-up notification and orders do not post. Traders are not permitted to trade with themselves or others within their institution.

Access to the Platform is contingent upon approval of the client as a Company Participant, Registered Trader or Sponsored Access Firm. The Company reserves the right to deny or suspend access as provided in the Rules of the Company.

Access to the Platform is also contingent upon good-standing status of Registered Traders within their respective companies. Designated user administrators of Participants and Sponsored Access Firms have the right to deny or suspend access to personnel under their umbrella. When requests for account suspension come via email, affected parties are notified before deactivation is processed.

In the event of a system-wide issue that jeopardizes the integrity of the platform, the RatesMatch administrator will proceed to emergency protocols that close all markets currently holding orders.

4.3 Trading

Clients can directly execute against existing resting orders in the market by hitting bids or lifting offers in the market. This can be done by clicking on the **H** or **L** in the grid next to the desired order (Figure 4.1), which will prompt the user with a hit/lift dialog (Figure 4.2). Clicking the Hit or Lift button on the hit/lift dialog will submit an opposing order to the trading engine.

USD SB/3ML	4Y		*	Sr	H	100.0	0.667500	0.677500	100.0	L	Sr	
USD SB/3ML	5Y		*	Sr	H	100.0	0.875000	0.885000	100.0	L	Sr	0.875...
USD SB/3ML	6Y		*	Sr	H	100.0	1.097500	1.107500	100.0	L	Sr	
USD SB/3ML	7Y		*	Sr	H	100.0	1.308750	1.318750	100.0	L	Sr	
USD SB/3ML	8Y		*	Sr	H	100.0	1.497500	1.507500	100.0	L	Sr	

Figure 4.1: Hit/Lift Workspace Buttons

Figure 4.2: Pre-confirm Window for Hit/Lift Functionality

4.4 Trade Submission

4.4.1 Cleared Trades with Pre-Trade Credit Limit Checks

RatesMatch supports the designation of a clearing method and/or venue for a given IRS instrument. Certainty of clearing is enabled via real time pre-trade credit checks utilizing Traiana's LimitHub service.

4.4.2 Bilateral Trades

RatesMatch also gives clients the option to transact bilaterally. Before bilateral trading can occur, client companies must designate credit administrators to configure the Credit Matrix to determine which companies receive credit, and the length of time that credit is extended. Direct orders are validated by the Credit Matrix, which determines whether counterparties have proper credit for trading.

5 Trading Limits

5.1 Trading Limits within RatesMatch

Risk administrators have the ability to configure a trading limits interface that allows them to set limits based on notional values. RatesMatch supports three risk administrator types:

1. FCM Risk Administrator – FCM risk administrators are able to set limits for legal entities and/or individual traders, which have an account with the FCM.
2. Company Risk Administrator – Company risk administrators are able to set limits for legal entities and/or for individual traders within their own firm.
3. RatesMatch's System Administrator – The RatesMatch system administrators can set limits on behalf of FCM and company risk administrators upon request.

Risk Limits

FCM Trading Account Overview
 Editable Risk Settings

Institution: Test2
 FCM Trading Account: LEI - DCO - 12345678

FCM Trading Account Block "N" indicates no restrictions (infinite limit setting)

FCM Trading Account	Risk Group	Long Limit	Usage	Threshold Warning	Short Limit	Usage	Threshold Warning	Clip Size
LEI - DCO - 12345678	USD Risk	2000	100	85%	2000	0	85%	500

Trader Block "N" indicates no restrictions (infinite limit setting)

Trader	Risk Group	Long Limit	Usage	Threshold Warning	Short Limit	Usage	Threshold Warning	Clip Size
Test2 Trader1	USD Risk	1500	100	85%	1500	0	85%	350
Test2 Trader2	USD Risk	1500	0	85%	1500	0	85%	500

Figure 5.1: Risk Limits for FCM Risk Admin Overview Screen

The trading limits interface has features that allow risk administrators to tailor limits per legal entity or user. Below is a description of each section:

- FCM Trading Account Overview:** Allows risk administrators to view all risk settings attributed to the selected FCM trading account
- Editable Risk Settings:** Allows risk administrators to set limits per risk group per legal entity and/or user
- Institution Selector:** Toggles the view between different institutions
- FCM Trading Account Selector:** Toggles the view between Trading Accounts
- FCM Trading Account Block:** Displays or edits risk limits for the entire legal entity
 - FCM Trading Account- Specifies to which FCM account the limits pertain to
 - Risk Group- Displays all risk groups available to the specified legal entity
 - Long Limit- Displays or edits the maximum notional value of the aggregate longs of the legal entity (*Important Note: This is the 10Y notional equivalent*)
 - Usage- Displays the total longs of all orders and trades belonging to the legal entity
 - Threshold Warning (Long)- Displays or edits the level at which a usage warning is displayed or emailed for aggregate longs
 - Short Limit- Displays or edits the maximum notional value of the aggregate shorts of the legal entity (*Important Note: This is the 10Y notional equivalent*)

- g. Usage- Displays the total shorts of all orders and trades belonging to the legal entity
- h. Threshold Warning (Short)- Displays or edits the level at which a usage warning is displayed or emailed for aggregate shorts
- i. Clip Size- Displays or edits the maximum volume allowed per order or trade (*Important*)

Note: This is the 10Y notional equivalent)

- F) **Trader Block:** Displays or edits risk limits for individual traders
- a. Trader- Specifies to which trader the limits pertain
 - b. Risk Group- Displays all risk groups available to the trader
 - c. Long Limit- Displays or edits the maximum notional value of the aggregate longs of the trader (*Important Note: This is the 10Y notional equivalent)*
 - d. Usage- Displays the total longs of all orders and trades belonging to the trader
 - e. Threshold Warning (Long)- Displays or edits the level at which a usage warning is displayed or emailed for aggregate longs
 - f. Short Limit- Displays or edits the maximum notional value of the aggregate shorts of the trader (*Important Note: This is the 10Y notional equivalent)*
 - g. Usage- Displays the total shorts of all orders and trades belonging to the trader
 - h. Threshold Warning (Short)- Displays or edits the level at which a usage warning is displayed or emailed for aggregate shorts
 - i. Clip Size- Displays or edits the maximum volume allowed per order or trade (*Important*)

Note: This is the 10Y notional equivalent)

The limits applied to each trader will follow the set of limits with the most restrictive settings, internally or externally, for the legal entity as a whole or for individual traders.

5.2 System Trade Controls

The following system controls are implemented in RatesMatch, in line with FIA's Risk Control Guidance:

1. **Erroneous Trade Entry:** The system imposes price and size limits on a per product level with different markets having varying limits to prevent erroneous trade entries. When limits are exceeded, users are informed via pop-up notification and orders do not post.
2. **Wash Trades:** The system does not allow clients to execute their own price or the price of another user with the same legal entity identifier (as such term is used in Part 45 of CFTC Regulations).
3. **Cancel-on-Disconnect:** The system will cancel all live prices for users and APIs if a system outage, including but not limited to a full power failure at the hosting site or scheduled maintenance processes, is detected. Trading on the platform will be suspended for the length of the outage.
4. **Kill Switch:** The system has the ability to remove all users and orders and either temporarily or permanently restrict the users from accessing the system.
5. **Velocity Threshold:** The system will limit the ability of an API or other programmatic connection from attempting to execute prices at a velocity that exceeds an allowed threshold set by the Company from time to time.
6. **Halt Trading:** The system has the ability to halt trading activity. Live prices will be cancelled in the halted markets and further trading activity will be prohibited until the halt is lifted.

In the event of a system-wide issue that jeopardizes the integrity of the System, the Company reserves the right to implement its emergency procedures in accordance with the GFI Swaps Exchange, LLC Rulebook.

5.3 Traiana LimitHub

Alternatively, instead of using RatesMatch's trading limits, FCMs can set risk limits in Traiana's LimitHub service. In such cases, all orders are routed to Traiana for pre-trade limit checks before being submitted to the market.

6. Trade Reporting

Details of all trades executed through RatesMatch are reported to the specified swap data repository. A complete Financial product Markup Language (FpML) trade description is used to provide all relevant data.

7. Confirmations

RatesMatch provides clients with a full range of trade reporting and confirmation services. Trade details are automatically reported in the RatesMatch Tradebook, a linked GUI application that provides all necessary trade details. The platform is also fully integrated with robust middle office systems of all supported brokerages which are used to deliver detailed trade confirmations to clients. Post trade straight-through-processing (STP) is also available via our trade capture API and connectivity to multiple clearing houses.

8. Market Data

RatesMatch provides participants with easy access to data for all markets traded on screen. An industry standard FIX API is available for both trade and market data access.

9. Trade Reports

Orders can be queried through the RatesMatch tradebook. This interface allows enabled customers to search trade details such as date, Trade ID, commodity, and region. There is an export feature that allows clients to download queried reports as a .csv file. This lets them easily feed the reports back into their own proprietary interfaces.



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1. Introduction

GFI Swaps Exchange LLC (the “Company”) is a swap execution facility that operates the CreditMatch[®] trading platform (“CreditMatch” or the “Platform”), a system that is used to trade credit default swaps (“CDS”). Credit Match combines request for quote (“RFQ”) with a fully anonymous, low-latency central limit order book (“CLOB”). This functionality enables buy-side and sell-side financial institutions and other market participants to trade, manage risks associated with price volatility and diversify their assets. The Platform also allows participants¹ to trade complex spreads.

Participants may access the Platform through an installed desktop application, which enables participants to place orders using a graphical user interface, an industry standard Financial Information eXchange (“FIX”) application programming interface (“API”) or through independent software vendors (including ION, Trading Technologies or others). Additionally, CreditMatch participants may customize their view and have full control over their orders while maintaining a fully anonymous environment.

CreditMatch enables pre-trade credit checks for transactions that are submitted to derivatives clearing organizations (DCOs). At present, the Platform submits all transactions to the ICE Clear Credit, ICE Clear Europe and LCH.Clearnet Limited for clearing and has the ability to scale clearing to support additional DCOs.

The Platform provides a comprehensive swap data reporting solution and reports all trades to the appropriate swap data repository. Additionally, the Platform utilizes a dedicated server to transmit detailed transaction information to National Futures Association, the Company’s Regulatory Services Provider so that compliance and surveillance functions may be conducted.

This document outlines the various functionalities of the CreditMatch platform. Please be advised that the functionalities described in this document are subject to applicable provisions of the Commodity Exchange Act, regulations of the Commodity Futures Trading Commission (the “CFTC”) and rules of the Company and the relevant DCO. If you have any further questions please contact the appropriate sales representative below:

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¹ The terms “participant” and “user” are used in this User Guide to reference Company Participants, Sponsored Access Firms and Registered Traders. See the Company Rulebook for further information.

2. Accessing CreditMatch®

CreditMatch offers two methods for interacting with the electronic trading platform: an installed desktop application, and a two-way API utilizing FIX Protocol 4.4.

2.1 CreditMatch® Desktop

The installed desktop offers a functionally rich graphical user interface, enabling Registered Traders to take full advantage of a variety of CreditMatch features in addition to basic order management and execution. Users may download the CreditMatch desktop from the web at <http://creditmatch.gfigroup.com>, and log on to the Platform with a valid username and password. The supplemental CreditMatch Installation Guide provides additional technical information concerning the desktop.



Figure 2.1

2.2 FIX API

The FIX API allows participants that have entered into a Direct Access Development Agreement to use their own proprietary system to interact with CreditMatch through a two-way low-latency interface. Information concerning the FIX API can be found in the supplemental CreditMatch FIX Specifications.

2.3 Logging In & Out of CreditMatch

1. Log-in. Launch CreditMatch® Desktop and log in using your username and password (Figure 2.1).

2. Log-out. To log out, a user may click on the LogOut menu on the upper left corner of the CreditMatch menu bar, and select the logout option. The Platform will allow the user to log off without a confirmation, but will automatically hold any live orders belonging to that user on logout.
3. Exiting CreditMatch. When a user opts to exit CreditMatch via the “Exit” function in the logout menu, the Platform shows the confirmation depicted in Figure 2.2 below and automatically holds any live orders belonging to that user on logout:

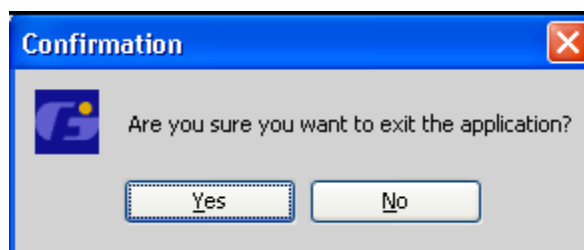


Figure 2.2

2.4 User IDs/Logins

CreditMatch requires a username and password to access the screen. Usernames and passwords may be obtained by contacting customer support in different regions at: (i) (212) 968-4162 (Americas); (ii) 44 (0)20 7877-8000 (Europe); or (iii) 65 6435-0451 (Asia) or by sending an email to etradingsupport@gfigroup.com. Accounts are issued on a per-user/per-request basis. First-time users are prompted to change their password upon initial login.

2.5 Market Participants

The types of participants on CreditMatch vary by role and permission.

Participants are divided into trading parties and intermediaries as follows:

- Trading parties are participants who participate in their own name to price and trade on the Platform. Trading parties may access the Platform through an intermediary.
- Intermediaries are not authorized to trade in their own name on the Platform.

The key combinations are described below:

1. **Trader:** Can view prices broadcast on the Platform, and depending on the type of permission, post prices and execute trades. Traders can be introduced to the Platform by an intermediary.

Permission Types

- **View Only:** Allows participants to view orders placed on-screen, but not directly interact with the Platform to manage orders or execute trades.
 - **Pricer:** Allows participants to manage their own orders, but not directly aggress to execute trades without the aid of a intermediary or GFI employee.
 - **Interactive:** Gives participants full access to CreditMatch's trading functionalities, including order management and execution.
 - **Joiner:** Allows participants to participate in Join the Trade sessions
2. **FIX API Users:** Can access the platform via ports 1080 and 443. The actual user accounts are limited by the permission types set for participants/traders. These users can participate in various trading protocols such as CLOB and JTT; and can interact with the liquidity pools either manually, or algorithmically, depending on what is plugged in to the FIX API on the participant side.
 3. **Data Administrator:** Allows users to maintain static data, user logins and entitlements, workspaces and price sheets, counterparty credit restrictions and carry out other such admin functions.
 4. **GFI Control Desk:** Can view, post and manage participant orders.
 5. **External Broker/Introducing broker:** Can view, post and manage client orders only for trading parties introduced by the same broker.

2.6 Requirements for Platform Use and Authorization to Trade

All participants must agree to the Terms of Use before gaining access by the "click-through" agreement. Users can view the Terms of Use through Credit Match or at <http://cts.gfigroup.com/legalTerms>.

3. Orders

3.1 Order Management

Orders can be entered by Registered Traders, or by intermediaries on traders' behalf. Intermediaries can submit resting orders through the Order entry dialog (Figure 3.1), or by directly entering them into the blue-shaded blotter columns (Figure 3.2). Registered Traders may enter and update their resting orders either via the blotter columns (Figure 3.2) or the trader order entry dialog (Figure 3.3).

Figure 3.1

Credit	BCst	Bid	BSz	Ofr	OSz	OCst	Bsz	Bid	Ofr	OSz
CDX On-The-Run 5yr										
IG16 V1 5y		22	25							
HY16 V1 5y		22.00	24.00							
CDX IG Outrights										
CDX IG Rolls										
CDX IG Curves										
IG14 5X10 x IG15 5X10 BOX										
IG16 3X5										
IG16 5x7										
IG16 5x10		35.5	38							
IG16 7x10										
IG15 3X5										
IG15 5x7										
IG15 5x10										
IG15 7x10										
IG14 3X5										
IG14 5x7		27								
IG14 5x10										
IG14 7x10										
IG13 3X5										
IG13 5x7										
IG13 5x10										
IG13 7x10										
IG12 3X5										
IG12 5x7										
IG12 5x10										
IG12 7x10										
IG11 3X5										
IG11 5x7										
IG11 5x10										
IG11 7x10										
IG10 3X5										
IG10 5x7		23	23							
IG10 5x10										

Figure 3.2

Figure 3.3

3.2 Order Attributes

All orders have the following attributes:

Order Attribute	Description
Transaction ID	ID associated with the order
Instrument ID	ID associated with the contract
Side	Bid or Offer
Price	Order price
Size	Order quantity
Legal Entity ID	ID of Registered Trader's legal entity
Trader ID	ID of Registered Trader
Clearing Method	ID of Specific DCO or Bilateral (if uncleared)
Firm/held Status	Firm (executable and visible to all), Unposted (executable, but visible only to authorized intermediary and user), Subject (not executable, but visible and subject to confirmation), or held (user has taken the order out of the market but has not deleted it; used to quickly re-firm the order to the market)
Last Updated By	Trader ID of user (trader or intermediary) who last updated the order
Last Updated Timestamp	Timestamp of the last update to any field on the order

Figure 3.4

3.3 Order Types Supported

The following order types are supported:

Order Type	Description
Limit Order	A bid or offer order submitted into the market at a specified price or better.
Time in Force (TiF)	A limit order which will be held within a specified time frame; all orders are held at end trading session.
Hidden Size (Reserve Size)	A limit order which is comprised of two components, a shown size and a hidden size; shown size is a standard limit order; hidden size is submitted as a new limit order when the initial shown size is fully executed. These orders trade in size increments and the total size does not become visible to the market.
Work the Balance	An order submitted via hit/lift dialog where it directly executes an existing resting order and remaining size is placed as a resting limit order.
Fill and Kill	An order submitted via hit/lift dialog where it directly executes an existing resting order and remaining size canceled.
Fill or Kill	An order submitted via hit/lift dialog where it directly executes an existing resting order; if full size of submitted order is not meet, the order is canceled.
Voice Trade	A trade executed over phone by a broker and entered through the Voice Trade dialog (not

available for traders).

Figure 3.5

3.4 Products and Strategies

Figure 3.6 provides a description of the products and strategies currently supported in CreditMatch:

Product and Strategy	Description
CDS Index	A single-legged CDS contract for one term of an index that represents multiple credit names.
CDS Tranche	A single tranche of a CDS Index.
CDS Calendar Spread	A spread between two terms for the same reference entity; one of the legs is the premium leg (usually the first), and the other the discount leg.
CDS Switch	A spread between two CDS contracts where one or more of the following differ between the two legs: reference entity, term, debt class, maturity, currency, restructuring type; one of the legs is the premium leg (usually the first), and the other the discount leg.

Figure 3.6

3.5 IOI (Indication of Interest)

CreditMatch supports a transparent IOI process for credit default swaps. Traders can send an IOI to the market for a particular maturity term for a CDS. This is done by right clicking on an existing instrument, and selecting the send IOI option from the context menu (Figure 3.7). At that point, the trader can pick the desired maturity term from a list of available terms to identify the instrument. This instrument and any orders on it are visible to all traders with entitlements to the instrument.

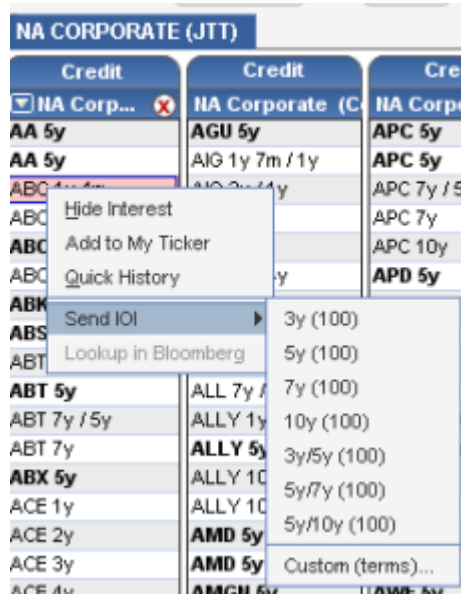


Figure 3.7

Participants can also use the FIX API to send IOI requests to CreditMatch. These requests must contain instrument name, maturity and expiration time. When CreditMatch receives an IOI, a new instrument with the requested maturity is created in CreditMatch and highlighted in blue until the IOI expires. Users get an IOI alert if they have their IOI popups enabled (Figure 3.8):

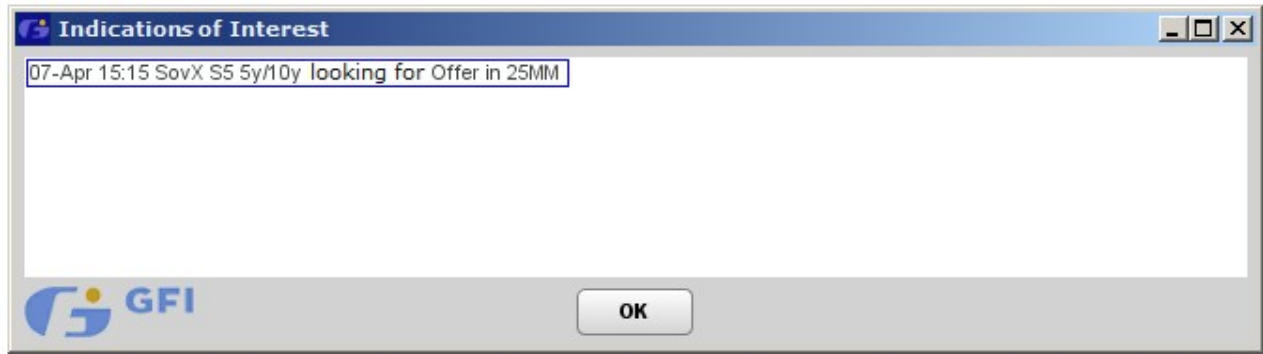


Figure 3.8

3.6 Market Depth

Registered Traders are able to view the market depth for products on CreditMatch. Orders are ranked in the depth queue by price/time priority. Both bids and offers are queued by best to worst price level, and within each price level, from the oldest to the newest. The best bid and offer are shown next to each other with the depth on the bid side going down below the best bid, and on the offer side going up above the best offer (Figure 3.10). Depending on the market convention for the product involved, the best bid may be the one with the highest or the lowest price level; and the rule for the best offer in each case is normally the opposite of that for the bid. The best price in the stack is always traded first and cannot be bypassed in the central limit order book. This rule does not apply when the best price is not tradable by the aggressor due to counterparty credit or clearing restrictions.

C 5y				
C 10y / 5y				
C 7y				
C 9y				
C 10y				
COF B 5y				
COF B 10y				


BAC 1y				
BSz	Bid	Ofr	OSz	
		16	✓	5
		15	✗	5
5	✓ 14	14.5	✓	5
5	✓ 12.5			
5	✗ 12			

Figure 3.10

4. Trading

4.1 Trade Matching/Execution

4.1.1 Aggressor Trade

A trade will be executed by the Platform when an aggressor hits a resting bid or lifts a resting offer. Users can directly aggress against a resting order in the market in three ways: (i) by selecting Hit/Lift from the right-click context menu on the target price; (ii) by clicking on the green check icon  next to the target bid/offer (when in-cell icons are enabled) (Figure 4.1); or (iii) by double clicking on the desired price.

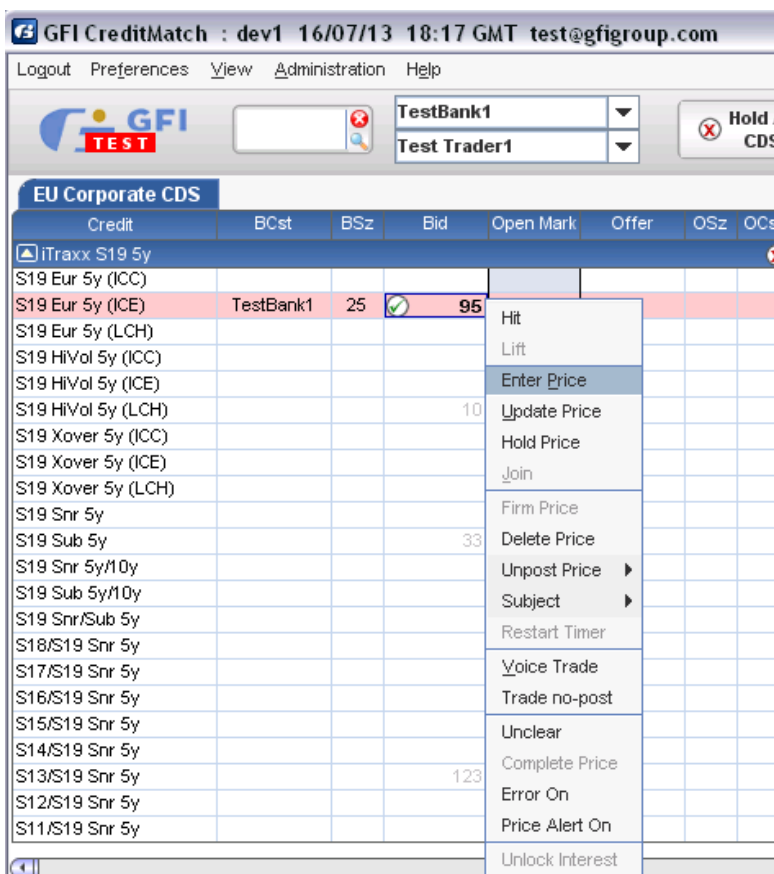


Figure 4.1

Any of these actions will bring up the trade dialog, which displays the instrument details, available size, price, clearing venue, and one or more hit/lift buttons with different size options for the user to click on to confirm their intent to execute the trade (Figure 4.2).

CreditMatch also has a DBV (deal by volume) feature that allows execution across the entire depth of the market. The System allows for a single price and multi-price deal by volume. Single price deal by volume allows the aggressor to trade all available volume at that price in the market. Participants can also trade through multi price deal by volume where the aggressor can choose to trade the entire or partial market depth at a volume weighted average price (VWAP) calculated by the Platform.



Figure 4.2

4.1.2 Auto-Matched Trade

CreditMatch instruments can be configured for auto-matching. In this case, an order submitted with a price that is equal to or crosses the best tradable price on the opposite side will match in accordance with the corresponding contra-side with the first price/time priority. When the user attempts to submit such a matching or crossing order, an alert is given to warn the user that it could result in a trade, requiring a confirmation to continue with the action (Figure 4.3).



Figure 4.3

4.1.3 Join the Trade (JTT)

For certain swaps, executed trades that are posted to the market activity window of the Platform may trigger a Join the Trade session during which prices in the stack at the same level are auto-joined in this session. During such a session, the counterparties to the trade may have a short exclusivity period in which to work-up the size of the original trade, with other participants then being invited to join the trade. The operation of the order book may or may not be suspended with respect to a swap that is subject to a join the trade session, but any pre-existing orders in the order book that are equal to or better than the price of a triggering transaction will be automatically included in the join the trade session. JTT orders are anonymous to other participants, and a JTT session will run for a preset period of time based on the product configuration, and unfilled orders at the end of the session will remain in the order book until expiration or cancellation.

4.1.4 [Reserved]

4.1.5 Request For Quote (RFQ)

RFQ is a trading workflow wherein participating traders act either as market makers (RFQ responders) or market takers (RFQ requestors). The RFQ requestor requests a bid/offer/market in the size of his choice from one or more selected market makers, either on a disclosed or anonymous basis. Interested market makers can respond with a price in the same size, with or without the option to impose a “last look” in the event that the requestor desires to accept their price. The process is timed. RFQs are currently effected through voice trading. The Company anticipates offering RFQ functionality that is fully automated in the near future.

4.2 Trade Submission

CreditMatch supports both bilateral and cleared trades for credit default swaps and indices.

4.2.1 Bilateral (Direct) Trades

For products that are not mandated to be cleared, the Platform provides a bi-directional credit matrix that may be used to restrict bilateral trading between counterparties, as needed. Credit restrictions can be set by trade direction (i.e., counterparty A may be able to buy from, but not sell to, counterparty B). Resting orders that are deemed to be non-tradable due to counterparty credit restrictions are displayed in red to the relevant participants.

4.2.2 Cleared CDS Trades with Pre-Trade credit checks

CreditMatch supports the designation of a clearing method and/or venue for a given CDS instrument. Certainty of clearing is enabled via real time pre-trade credit checks utilizing Traiana’s CreditLink service.

4.3 Platform Trade Controls

In the event of a system-wide issue that jeopardizes the integrity of the Platform, the Company reserves the right to implement its emergency procedures in accordance with its Rules, notwithstanding, in the normal course, trade and risk controls that are resident in CreditMatch as described below:

4.3.1 Erroneous Order/Trade Entry

The Platform imposes price and size limits at the product level where limits vary by product to prevent erroneous trade entries. When limits are exceeded, Users are informed via pop-up notification and orders do not post.

For order/trade size, these include min and max size checks. Prices are validated against a price tick, min, max and variance from the most recent price on an instrument based on a threshold set as a percentage change. Users are warned when they are entering a price that is above or below this threshold via a pop-up (Figure 4.4).

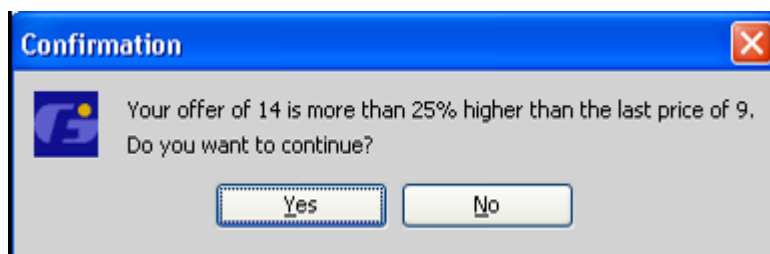


Figure 4.4

In addition to instrument level price and size validations, there is also a user preference setting to require confirmation of a trade prior to submission.

4.3.2 Wash Trades

The Platform does not allow participants to execute their own price or the price of another user with the same legal entity identifier (as such term is used in Part 45 of CFTC Regulations).

4.3.3 Kill Switch

The Platform has a Kill Switch that enables the removal of all orders belonging to one or more users, with the option to temporarily or permanently restrict those users from accessing the system.

4.3.4 Halt Trading

The Platform has the ability to halt trading activity in a particular instrument or market. When trading is halted, all live prices are cancelled and further trading activity in the affected instruments/markets is prohibited until the halt is lifted.

4.3.5 Velocity Threshold

The Platform limits the ability of an API or other programmatic connection from attempting to execute prices at a velocity that exceeds an allowed threshold set by the Company from time to time.

4.3.6 Cancel-on-Disconnect

The system will cancel all live prices for all GUI and API users if a system outage, including but not limited to a full power failure at the hosting site or scheduled maintenance processes, is detected. In the event of a broad outage affecting many users, trading on the Platform will be suspended for the duration of the outage.

4.4 Hours of Operation

CreditMatch is open for trading 23/6 with the exception of scheduled maintenance times.

5. Trading Limits

5.1 Daily trading limits

CreditMatch provides for real-time monitoring of daily trading limits set by participants. These limits can be maintained by a user's authorized risk administrators. Limits can be set for the participant as a whole, or for a subset of users and/or products transacted on platform.

The Platform provides for two types of daily trading limit checks depending on user preference:

1. **Orders + Trades:** this is a limit on the total notional size of trades executed in CreditMatch for the day, plus all currently active executable orders.
2. **Trades Only:** this is a limit on the total notional size of trades executed in CreditMatch for the day, excluding orders not yet executed.

Risk administrators may set daily trading limits for a given institution based on any of the following:

1. **Instrument type:** used to apply limits by type of instrument (e.g., CDS products).
2. **Site:** may be used to set limits for a particular branch or location of the institution.
3. **Desk:** enables setting of limits for a group of traders with respect to a certain set of products (e.g., a participant's New York iTraxx desk).

Using the above methodologies, risk administrators may define one or more limit pools per institution. In addition, they may also specify one or more percentage thresholds for each limit pool, which when breached, would result in email alert notifications. A breach of the total limit pool (100%) will trigger the cancellation of all related open orders and block further trading until the breach has been cleared.

Figure 5.1 below is a view of the user interface provided for the administration of the daily trading limits:

Del	Instrument Type	Site	Desk	Reset Time (GMT)	Clip Size (MM USD)	Trades Limit	Trades Usage	Order + Trades Limit	Orders + Trades Usage
<input checked="" type="checkbox"/>	Credit Default Swap (CDS)	TestBank1	Global CDS Desk	22:00:00	10	150	0 MM (0%)		

Edit

Instrument Type:

Site:

Desk:

Reset Time: HH:mm:ss (GMT)

Clip Size (Notional): MM USD

Email Breach Alerts To:

Trades Limit

Enabled:

Limit: MM USD

Usage:

Alert Thresholds (%):

Orders + Trades Limit

Enabled:

Limit:

Usage:

Alert Thresholds (%):

Data as of 8:52 PM

Figure 5.1

6. Trade Reporting and Confirmations

Where designated, Platform trades are reported to the involved counterparties through the CreditMatch Straight-Through-Processing API.

Real-time trade logs are available within the CreditMatch desktop for each user, and are limited to data related to the instrument that the user is entitled to view. For participants, counterparty data is hidden unless they are involved in the trades.

From the above trade logs, counterparties to trades are able to generate and view trade tickets that include key trade details. A trade ticket can be accessed by clicking on the desired trade record in the trade logs, and may look like the example shown below (Figure 4.5)



Trade Ticket

GFI **GFI CreditMatch Trade Details**

You are party to the following transaction

Trade Date	16 July, 2013
Effective Date	20 March, 2013
Scheduled Termination Date	20-Jun-2018
Seller	TestBank2 Test Trader
Buyer	TestBank1 Test Trader1
Clearing Method	iceclear
Reference Entity	iTraxx Europe Series 19 Version 1
Seniority	INDEX
Reference Obligation	To be agreed. No default ref. ob. available.
Calculation Amount	EUR 25,000,000
Price	0.95%
Restructuring Terms	MODIFIED MODIFIED RESTRUCTURING
Initial Payment Amount	EUR 77622
Initial Payment Payer	TestBank2

This trade is subject to finalisation of ISDA documentation at which point a full trade confirmation can be issued to you as detailed in the CreditMatch trading procedures.

Figure 4.5

7. Market Data

CreditMatch provides participants with easy access to data for all markets traded on screen. Users can access historical price and trade data through the CreditMatch graphical user interface using the Quick History function. Current live market data is also accessible through the FIX API.



ForexMatch®

Trading Platform User Guide

August 2013

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Be advised that the various functionalities described in this document are subject to any and all applicable Rules and Regulations.

If you have any question, please do not hesitate to call GFI ForexMatch® Support.

New York:

+1 212 968 2827

Web: www.GFIfx.com

Email: ForexMatch@gfigroup.com

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Introduction

GFI FX Trading Systems

GFI ForexMatch is an electronic trading system for FX derivatives, supporting GFI's hybrid brokerage model, combining traditional voice brokerage services with sophisticated electronic trading technology to deliver the most efficient in deal execution.

The ForexMatch system eases the process of getting client prices to market, enables FX instrument trading online and allows the analysis of market trends with the latest independent prices.

The **GFI FX Blotter** is the trade capture system which interfaces with ForexMatch and enables both clients and internal GFI personnel to distribute trade details into relevant risk management and financial systems. The FX Blotter offers clients Straight-Thru-Processing (STP) for both electronic and voice brokerage services. STP seamlessly passes trade detail information to all parties involved in real-time, without manual handling or redundant processing.

FX Blotter is a web based tool for the capture of FX Products traded through GFI's electronic and voice-based brokerage business including, Spot, Options, Forwards, Forward Swaps, NDF and Interest Rate Swap trades.

The **GFI FIX API** (application programming interface) is a bi-directional trading API that enables client-side trading applications to get electronic access to live market prices.

Foreign Exchange Products

GFI ForexMatch offers a number of strategies in the following foreign exchange products:

Non-Deliverable Forwards – Standard tenor ‘on the run’ NDF’s (USD settled) with an ability for additional contracts to be created for broken dates..

FX Options – Standard ‘on-the-run’ Straddle, Risk Reversal and Butterfly strategies are available on a continuous basis. Bespoke options (specific strike/delta/spreads) are available using Request for Quote.

Interest Rate and Basis Swaps – Standard tenor ‘on the run’ regional IRS and Basis Swap products with an ability for additional contracts to be created for broken dates.

Precious Metals – Standard ‘on-the-run’ Straddle, Risk Reversal and Butterfly strategies are available on a continuous basis.

Execution Modes

GFI ForexMatch offers various means of trade execution, including:

Order Book – The Order Book is an electronic system used to display, record and execute orders based on price, time and quantity for either a standard or specific product.

Request for Order Book (RFOB) – To accommodate a range of Calls/Puts and combination of dates, strikes or deltas that are common to FXO products, specific orders can be created by traders or brokers (on behalf of a trader) using an interest creation tool. These creation of the interest provides a CLOB for this contract.

Request for Quote (RFQ) – Provides the ability for customers to generate a request for quote on a variety of option types defined by strike or delta, amount, strategy, date, currency pair etc. Market Makers quote (either static or streaming) back to the client who can then elect to trade with any market maker. The market maker is not able to see the other market maker’s quotes.

Accessing ForexMatch

ForexMatch Graphical User Interface (GUI)

The ForexMatch Order book, RFQ and Risk Mitigation execution types are available via a web based GUI accessed by internal and external users, which connect through a specified URL via internet or BTRadianz lines. The GUI requires a valid and active username and password.

ForexMatch Application Programming Interface (API)

GFI ForexMatch offers a bi-directional trading API that enables client-side trading applications to get electronic access to live market prices. GFI API supports the industry standard Financial Information eXchange protocol (FIX). GFI API supports both order processing and market data in its FIX implementation. The API requires a valid and active username and password in addition to clearing the security level for their institution. The API supports FXO, NDF and Forward products.

ForexMatch Login Security

The ForexMatch system has three security access levels. The user must meet or exceed the security parameters for their institution to access the ForexMatch system.

Low – Requires a valid Username and Password.

Medium – Requires a valid Username and Password, the IP must be recognized as an authorized IP address from the institution of the user.

High – Requires a valid Username and Password, the IP must be recognized as an authorized IP address from the institution of the user, password must be minimum 8 characters, password must have 2 alphanumeric and 2 numeric, password will reset every 30 days, the account will lock after 5 unsuccessful password attempts, new passwords must be unique to the last 5 passwords.

ForexMatch Participant User Types

Role	Function	Access
IB Voice Broker & IB Voice Broker Clerk	Voice broker may manage orders and or transactions on behalf of their clients.	Access to the system is based on permissions ranging from view-only to fully interactive and can be configured on a per-product basis. Also allows the ability to view and confirm trade details in the Trade Capture System on behalf of clients.
SEF Control Desk	SEF personnel who monitors and modifies SEF trades.	Access to the system is based on user role. SEF personnel has full access to view and modify SEF trades.
Trader	A Trader is a Participant that acts as a user of GFI ForexMatch by contributing prices to the ForexMatch trading application. A Trader can view, enter and trade on prices via ForexMatch.	Access to the system based on permissions which may vary from none, view only to fully interactive on a per market/product basis.
Admin	These users are GFI System Administrators who maintain the configurations of the ForexMatch and FX Blotter applications and sets the User permissions to the applications in the Admin Console.	Access is managed based on internal security protocols and only upon approval of senior level supervisors.
Onboarding Admin	GFI System Administrators who are responsible for onboarding clients to the SEF.	Access is managed based on internal security protocols and only upon approval of senior level supervisors.
Super Admin	The GFI System Administrator maintains the configurations of the ForexMatch and FX Blotter applications and sets the User permission to the applications in the Admin Console.	Access to greater number of configurations and user setup. The Super Admin is the Admin for all users that are Admins.

ForexMatch Support

Participant Management

Authorized System Administrators may access the FX Admin Console to add, update and terminate users from the ForexMatch Trading System when required.

The GFI SEF onboarding process will be followed for user set-up.

Once the relevant information has been gathered, the System Administrator will add the user on the FX Admin Console.

All participants must agree to the Terms of Use before being able to access. The ForexMatch Terms of Use can be access here:

<https://www.gfifx.com/FXTrading/agreement.htm>

Incident Escalation

An incident that occurs on ForexMatch should be reported to GFI Support staff directly or via their GFI account manager or broker. GFI Support is available in the following major centers as well as several local centers.

New York
+1 212 968 2827

London
+44 207 877 8161

Singapore
+65 6435 0451

Global Support: ForexMatch@gfigroup.com

The escalation procedure will be determined based on the severity of the event. Incidents that are deemed minor (e.g. forgotten password, password lock-out, instruction on system usage) are typically initiated by the user via e-mail, instant message or phone and addressed by local GFI Support personnel. System events classified as significant are escalated by GFI Support personnel through to Product Management and resolved accordingly.

ForexMatch Order Book Trading

ForexMatch Orders

Within the ForexMatch order book, orders are ranked from highest bid (best) to lowest bid (worst) and lowest offer (best) to highest offer (worst).

Order placement within the same price level is based on a first in/ first out basis. Orders are automatically matched if the bid is equal to or higher than the offer from another counterparty.

Participants requesting to trade on a resting order in the system will be executed based on priority and a trade will take place if the order is still available and there is sufficient credit.

- Traders can submit single orders or multiple related orders (runs) to the Order Book.
 - Traders enter orders on behalf of their trading group which is a subset of their Institution.
 - All orders are Good Til Cancel for the trading day
- SEF employees can cancel orders at the request of a Participant.
- Voice Brokers may place and cancel orders as well as execute on resting bids and offers on behalf of their customers.
- Traders are able to modify orders by overtyping and resubmitting.
- Traders are able to cancel orders at any point.



Figure 1: Order book with Execution dialog

EUR/USD - SD SEF IY				
REF	Time	Min / Max		RUN
ON		7.20	9.80	✓ 30
1W		7.50	8.30	✓ 30
2W		7.80	8.40	✓ 30
1M		8.05	8.40	✓ 30
2M		8.15	8.40	✓ 30
3M		8.10	8.45	✓ 30
6M		8.55	8.85	✓ 30
9M		8.90	9.20	✓ 30
1Y ³⁰		9.15	9.45	✓ 30
2Y		9.45	9.75	✓ 30
3Y		9.55	9.95	✓ 30
4Y		9.65	10.05	✓ 30
5Y		9.80	10.20	✓ 30
7Y		10.00	10.40	✓ 30
10Y		10.15	10.55	✓ 30
15Y		11.10	11.90	✓ 30

Figure 2: Order book with Execution alert

ForexMatch Order Types

Order Type	Description
Limit	Placed into the system to buy or sell a specified amount at a specified price
Market Limits	Participants can set Spot limits on FX Options orders so that if the underlying spot market breaks a pre specified level the orders will be removed.
Time Out	Participants can set time limits on their orders.

ForexMatch Trading Controls

Trading controls are implemented to safeguarding the user and the marketplace in accordance with regulatory requirements and market practices.

Trading Control	Description
Inverted Market	A system alert warns a user attempting to enter a price that is inverted; a bid that is higher than the offer or an offer that is lower than the bid. This will protect users from entering unintentional prices.
Price Variance Threshold	A system alert warns a user attempting to enter a

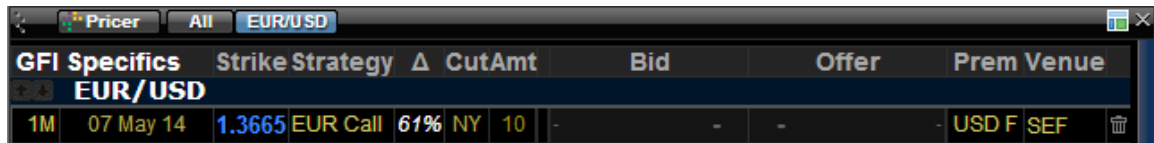
	price exceeding the variance threshold. The variance threshold is a top and bottom level calculated as a percentage from the last tradable price entered for that instrument. This will protect users from entering unintentional prices.
Maximum Notional	A system alert warns a user attempting to enter a notional amount that exceeds the maximum allowed value. This will protect users from unintentionally entering unusually large notional sizes.
Message per Second Threshold	The system will limit the ability of an API or other programmatic connection from attempting to execute prices at a velocity that exceeds the allowed threshold. This mitigates risk to clients from incidents of errant high volume order requests generated by a programmatic application. The system will terminate the connection when the threshold has been breached.
Kill Switch (Trader)	The system has the ability to remove a user and their orders and either temporarily or permanently restricts the user from accessing the system.
Kill Switch (Institution)	The system has the ability to remove all users and orders at an Institution and either temporarily or permanently restrict the users from accessing the system.
Halt Trading (All Markets) (will be included in future release)	The system has the ability to halt trading activity on all markets. Live prices will be cancelled in the halted markets and further trading activity will be prohibited until the halt is lifted.
Halt Trading (Specified Markets) (will be included in future release)	The system has the ability to halt trading activity on specific markets without impact to other markets. Live prices will be cancelled in the halted market and further trading activity will be prohibited until the halt is lifted.
Wash Trades	The system does not allow clients to execute their own price or the price of another user in the same trading book if they are both trading under the same LEI.

Internal Credit Restrictions	Internal credit restrictions, established by authorized GFI and Institutional users, will prevent an execution on a price if the execution exceeds the available credit limit for the user's own institution.
Counterparty Credit Restrictions	Counterparty credit restrictions, established by authorized GFI and Institutional users, will prevent an execution of a price between counterparties if the execution exceeds the available credit limit against the counterparty.
Client Outage	The system will cancel all live prices for a user and API if it detects the client has lost connectivity. Further trading activity will be prohibited until the connection is reestablished.
System Outage	The system will cancel all live prices for users and APIs if a system outage, including but not limited to a full power failure at the hosting site or scheduled maintenance processes, is detected. Trading on the platform will be suspended for the length of the outage.

Request for Order Book

GFI ForexMatch provides the ability for users to create a Request for Order Book. The user will be able to create a new contract on demand which will then have the characteristics of trading on an order book. The RFOB allows users create a request with parameters including:

- Currency Pair
- Strategy
- Cut
- Expiry
- Delta/Strike
- Amount
- Premium Currency
- Quote Type



GFI Specifics		Strike Strategy	Δ	CutAmt	Bid	Offer	Prem	Venue
EUR/USD								
1M	07 May 14	1.3665	EUR Call	61%	NY	10	-	-
							USD F	SEF

Figure 3: Request for Order Book

Request for Quote (a.k.a. “GFI Direct”)

GFI ForexMatch provides the ability for users to create a Request for Quote to a number of market makers. The LEI of the Requestor will be disclosed. Quotes in response to the RFQ will be available to the requestor only. The Requestor may select any quote to deal on and will receive a notification that the trade has been transacted. The quote may be either static or streamed depending on the ability of the market maker. The RFQ allows traders to ask for a price on a bespoke FXO with parameters including:

- Currency Pair
- Strategy
- Cut
- Expiry
- Delta/Strike
- Amount
- Premium Currency
- Quote Type



Figure 4: Request for Quote

Accessing FX Blotter

FX Blotter Graphical User Interface (GUI)

The GFI FX Blotter is available via a web based GUI accessed by internal and external users, which connect through a specified URL via internet or BTRadianz lines. The GUI requires a valid and active username and password.

GFI FX Blotter logon page can be found at www.gfifxblotter.com

FX Blotter Trade Capture

Trade executions on GFI ForexMatch- Order Book, FIX API and the Risk Mitigation service will be captured in the FX Blotter. All available details will be delivered from the execution source to the FX Blotter.

The following information is passed to the FX Blotter from the execution engine:

- Transaction ID – ID associated to the trade
- Trade Timestamp – Timestamp of execution
- Instrument ID – ID associated to the instrument of the order
- Bid ID – ID of bid order
- Offer ID – ID of offer order
- Price – Trade price
- Size – Trade size
- Buyer ID – Trader ID of buyer
- Seller ID – Trader ID of seller
- Buyer Legal Entity ID – LEI of the buyer's legal entity
- Seller Legal Entity ID – LEI of the seller's legal entity
- Buy Actor ID – User ID of last authorized user for the buyer
- Sell Actor ID – User ID of the last authorized user for the seller
- Buy Broker ID – ID of the broker for the buyer
- Sell Broker ID – ID of the broker for the seller
- Aggressor – Specifies if the buyer is the aggressor or initiator of the trade
- Execution Path ID – ID of execution path (i.e. bilateral or DCO).

User information such as Buyer/Seller will be taken from the counterparties on the trade.

In the case of FX Options, the volatility is used to calculate the full set of trade details using market standard Black Scholes pricing (facilitated by GFI Fenics[®] Software) to convert the volatility into a premium USD or other currency amount. The underlying values required for this calculation such as spot, swap and deposit

are captured from a third party vendor at the time of the trade. In addition expiry tenors such as 1month will be used to define other date parameters of the option using standard methodology.

FX Blotter Trade Confirmation

GFI ForexMatch offers trader affirmation for FX Options, NDFs, Forwards and IRO/IRS trades. Institutions are able to access a web GUI where they can view their trade details and select 'Confirm' or 'Amend'.

Following affirmation/confirmation of the trade details by both buyer and seller GFI FX Blotter will then send out an e-mail or Fax confirmation to the appropriate back offices at the counterparties' place of business and also electronically send the details of the trade and commission to GFI's finance systems for invoicing.

FX Blotter Straight-Through-Processing

For institutions that have their own proprietary system for affirming/confirming trade details, GFI FX Blotter can manage a two way electronic affirmation process whereby GFI FX Blotter sends the confirmed or unconfirmed trade details to the institution's system (depending on client request) and the Institution can reply with an electronic affirm or reject to the GFI FX Blotter.

The GFI FX Blotter supports numerous third-party affirmation and confirmation systems including bank proprietary systems, Thomson-Reuters TRTNS and MarkitWire.

GFI ForexMatch Swap Data Repository (SDR) Reporting

GFI will report the trade to the SDR following an execution on the GFI SEF. The following is the process for reporting trades on ForexMatch CLOB.

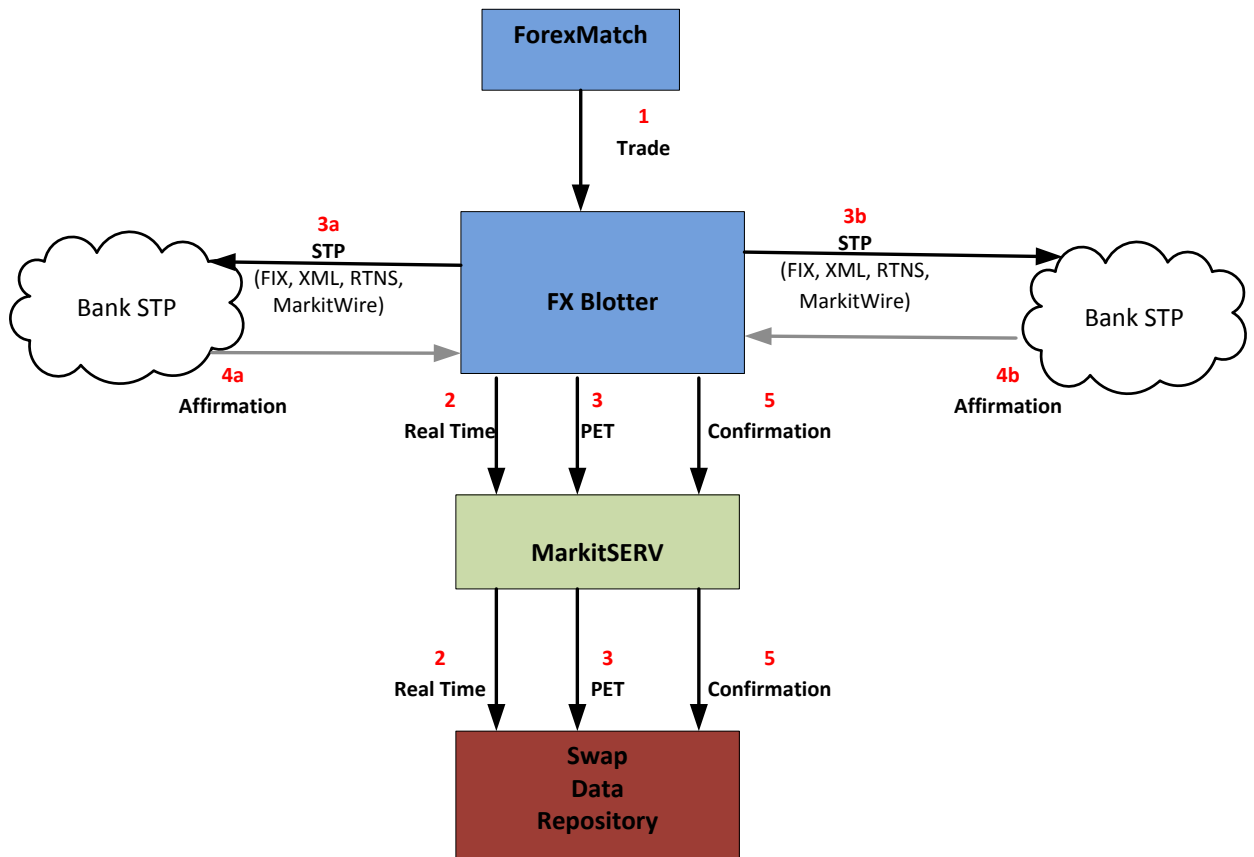


Figure 5: GFI ForexMatch Swap Data Repository (SDR) Reporting workflow

1. A ForexMatch electronic or hybrid trade will bridge to FXBlotter.
2. Upon bridging to FXBlotter, it sends SEF trade details down to MarkitSERV, a middleware provider which forwards the Real-Time (RT) reporting message to the SDR (DTCC).
3. The Primary Economic Term (PET) data is sent to SDR via MarkitSERV immediately following the RT message. Where a trade is modified by SEF Control Desk personnel, the RT and PET messages are resent to MarkitSERV.
 - a. GFI triggers STP to client 1, the STP mechanism is stipulated by the client.
 - b. GFI triggers STP to client 2, the STP mechanism is stipulated by the client.

4. GFI receives trade affirmation from the client.
 - a. Client sends acknowledgement of receiving the STP.
 - b. Client sends acknowledgement of receiving the STP.

5. Upon both sides confirming the trade details on FXBlotter, the Confirmation (CONF) data is sent to MarkitSERV to be forwarded to the SDR.

Request for Quote (a.k.a. “GFI Direct”)

In this relationship-based RFQ, GFI IB accepts an RFQ order and routes it to the SEF for execution.

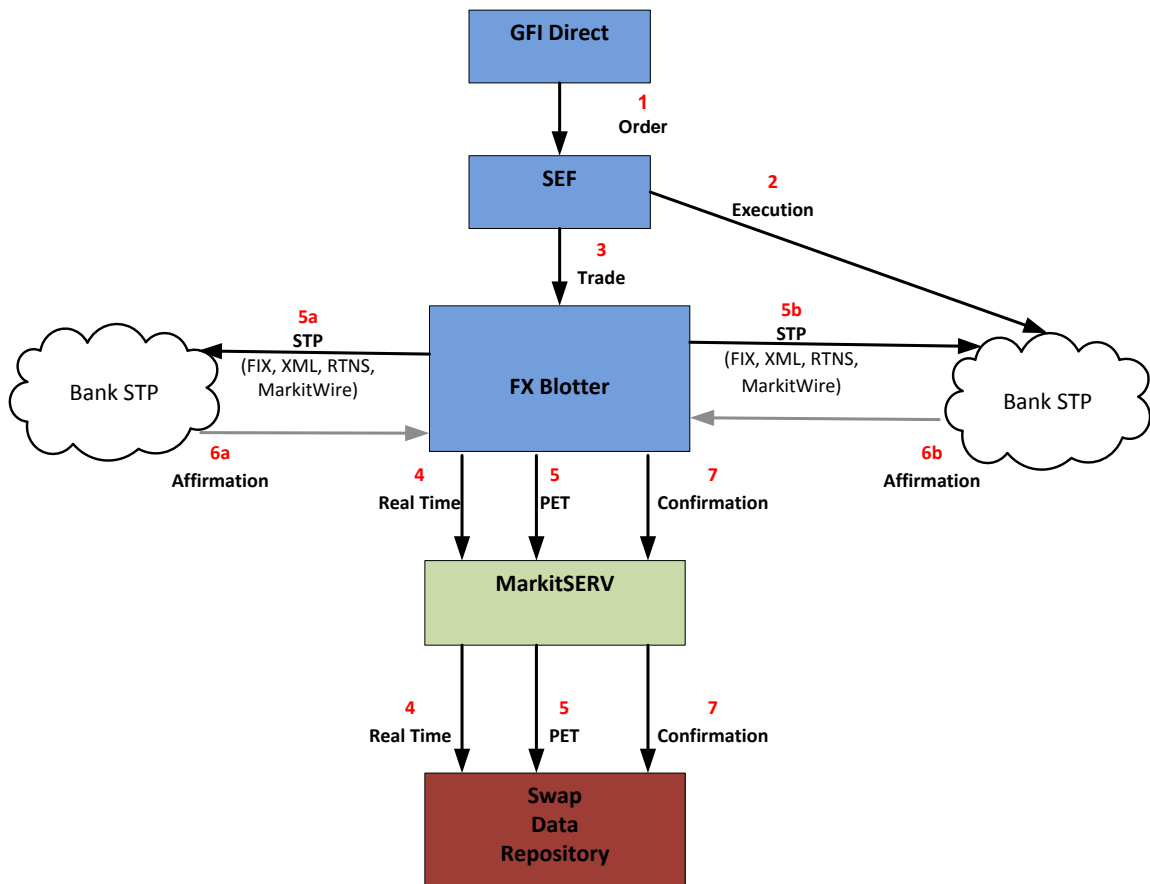


Figure 6: Request for Quote (a.k.a. “GFI Direct”) workflow

1. Client submits the RFQ order to GFI who acts as agent and passes the order to the SEF for execution.
2. In a GFI Direct trade, the Liquidity Bank with last look will receive pertinent regulatory related information such as the USI, Reporting Counterparty, Regulation Venue Type (which identifies if trade is SEF or Off-Facility) in the NewOrder message.
3. GFI Direct trade details bridge to FXBlotter, our trade capture system.
4. Upon bridging to FXBlotter, it will send SEF trade details to MarkitSERV, a middleware provider which forwards the Real Time (RT) message to the SDR (DTCC).
5. The Primary Economic Data (PET) message to the SDR immediately after the RT in a separate message.
 - a. GFI triggers STP to client 1, the STP mechanism is stipulated by the client.
 - b. GFI triggers STP to client 2, the STP mechanism is stipulated by the client.
6. GFI receives trade affirmation from the client.
 - a. Client sends acknowledgement of receiving the STP.
 - b. Client sends acknowledgement of receiving the STP.
7. Upon both sides confirming the trade details on FXBlotter, the Confirmation (CONF) data is sent to MarkitSERV to be forwarded to the SDR.

Accessing GFI ForexMatch Market Data

GFI ForexMatch provides real-time streaming tradable market data for FX Options using the FIX API.

GFI ForexMatch provides real-time streaming tradable market data for Spot, Forwards, NDFs, Forward Swaps, FX Options and Interest Rate and Basis Swaps. Clients are able to see the trades that take place during a 12 hour time period using the Trades Log at the bottom of the GUI. Clients are also able to conduct historical searches for all of their own trades using the FX Blotter.

Additional queries may be developed on request.

EnergyMatch®

Trading Platform User Guide

Document Version 2.1
Updated 10 April 2014

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1. Introduction

GFI Swaps Exchange LLC (the “Company”) is a swap execution facility that allows market participants to trade a variety of swaps.

The Company’s EnergyMatch[®] trading platform (“EnergyMatch” or the “Platform”) is a system for the trading of power and natural gas swaps that combines the Company’s request for quote (“RFQ”) functionality with a fully anonymous central limit order book that operates in a low-latency trading environment. EnergyMatch enables buy-side and sell-side financial institutions and other market participants to trade, manage risks associated with price volatility and diversify their assets. To accomplish this, EnergyMatch offers market participants the ability to submit RFQs and utilize a variety of order types to transact in outright contracts on a central limit order book. EnergyMatch also provides market participants the ability to trade complex spread orders by implying prices across various points in the yield curve.

The Platform is easily accessible through an open access Java-based platform that also allows market participants to place orders using a graphical user interface (“GUI”), an industry standard Financial Information eXchange (“FIX”) application programming interface (“API”) or through independent software vendors. Additionally, EnergyMatch allows customers to customize their view and have full control over their orders while maintaining a fully anonymous environment. At present, the Platform submits transactions to the Chicago Mercantile Exchange Inc. Clearing House (“CME Clearing”), ICE Clear U.S., Inc. (“ICE U.S.”) or ICE Clear Europe, Limited (“ICE Europe”) for clearing and has the ability to scale clearing to support additional derivatives clearing organizations (“DCOs”).

The Platform provides a comprehensive swap data reporting solution and reports all trades to the appropriate swap data repository. Additionally, the Platform utilizes a dedicated server to transmit detailed transaction information to the Company’s regulatory services provider so that compliance and surveillance functions may be conducted.

This document outlines the various functionalities of the EnergyMatch platform. Please be advised that the functionalities described in this document are subject to applicable provisions of the Commodity Exchange Act, regulations of the Commodity Futures Trading Commission (the “CFTC”) and rules of the Company and the relevant DCO. If you have any further questions please contact the Company as provided below:

[ENERGYMATCH HELPDESK](#)

Phone: +1 866.846.2042

Email: support@energymatch.com

2. Accessing EnergyMatch


EnergyMatch offers a variety of methods for interacting with the electronic trading platform. Users may download the Java-based platform at www.energymatch.com. In addition to the EnergyMatch Java-based platform, EnergyMatch has developed a two-way low latency API utilizing the FIX Protocol 4.4. This method of accessibility allows traders the opportunity to interact with the Platform by using their proprietary system.

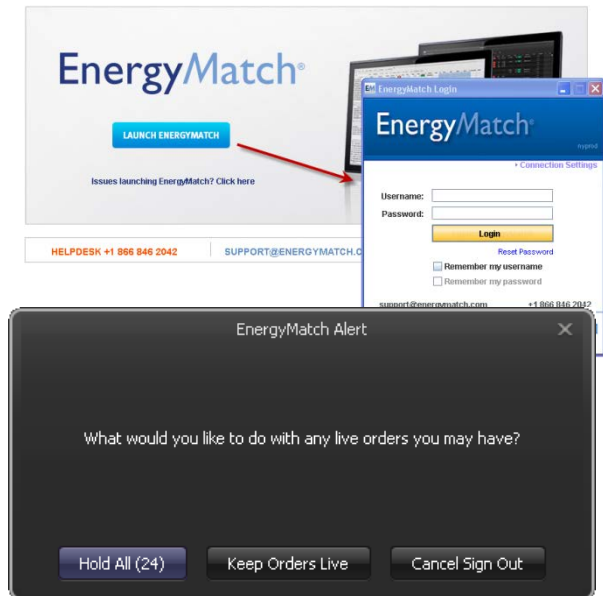
Information concerning the FIX API can be found in the supplemental EnergyMatch FIX Specification for those users who have entered into an API License Agreement, or have established a relationship with an Independent Software Vendor, Participant or Sponsored Access Firm that has entered into an API License Agreement.

Certain swaps traded on the Company are subject to mandatory clearing requirements under CFTC Regulations. A client that is not a clearing member of the applicable DCO must establish arrangements for its trades to be cleared

by a clearing member. The Company submits all such trades to CME Clearing, ICE U.S. and ICE Europe, but may in the future enter into similar arrangements with other DCOs.

2.1 Logging In & Out of EnergyMatch

1. EnergyMatch can be launched from www.energymatch.com by clicking the “Launch EnergyMatch” button. A separate login window will appear for the username and password.
2. To log out, click  Logout under “Connection” in the upper left hand corner of the EnergyMatch screen.
3. Logout attempts by a user with live orders still on-screen will trigger a verification window with the question: *“What would you like to do with any live orders you may have?”* The choices are: **Hold All**, **Keep Orders Live**, or **Cancel Sign Out**.
4. When logging out without having orders on the screen, the system asks the user, *“Are you sure you want to sign out?”* Responses include **Sign Out**, which automatically times out your session after 30 seconds, and **Cancel Sign Out**.



2.2 User IDs/Logins

EnergyMatch requires a username and password for access. Usernames and passwords may be obtained by contacting customer support at (866) 846-2042, or by sending an email to support@energymatch.com. Accounts are issued on a per user basis. First-time users are prompted to change their password upon initial login.

2.3 Market Participants

EnergyMatch users vary by role and permission, which are described below:

1. **Client/Trader**¹
 - Can view prices posted by others, manage their own prices and interact and transact on those prices.
 - **Permission Types**
 - **View Only/Voice Trade Owner/Trade Owner:** These permission levels allow clients to view orders placed on-screen. Voice Trade Owner is a clerical function that allows brokers and clerks to log

¹ The terms “client” and “trader” are used in this User Guide to reference Company Participants, Sponsored Access Firms and/or Registered Traders, as appropriate. See the Company Rulebook for further information.

transactions brokered over the voice system. It also allows clients to view the tradebook. Trade Owner gives brokers the option to post orders for them on their behalf.

- **Interactive:** In addition to above, this permission gives clients full access to EnergyMatch’s trading functionalities.

2. Credit Administrator

- Can access the credit matrix and extend and remove counterparty credit.

3. Risk Administrator

- Can access the trading limits interface.

4. FIX API Users

- Can access the Platform via ports 1080 and 443.

5. Brokers

- Can view, post, and transact on orders per permission type.
- **Permission Types**
 - **View Only:** Can view the client list and orders.
 - **Voice Trade:** In addition to above, this enables brokers and clerks to log transactions brokered over the voice system, and to view the tradebook.
 - **Interactive:** In addition to above, this permission gives brokers full access to EnergyMatch’s trading functionalities on behalf of clients.

2.4 Requirements for System Use and Authorization to Trade

All market participants must agree to the User License Agreement before gaining access by the “click-through” agreement.

3. Orders

3.1 Order Management

Orders may be entered by traders or by brokers on a trader's behalf. Resting orders can be submitted via the New Order Entry Dialog (Figure 3.1) or directly into the grid (Figure 3.2).

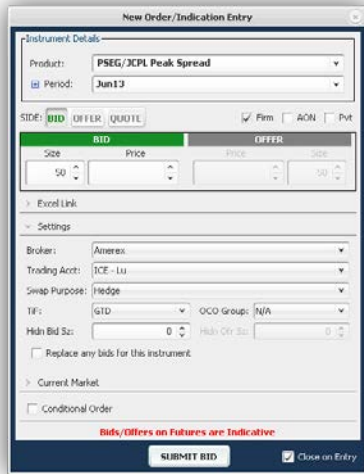


Figure 3.1: New Order Entry Dialog

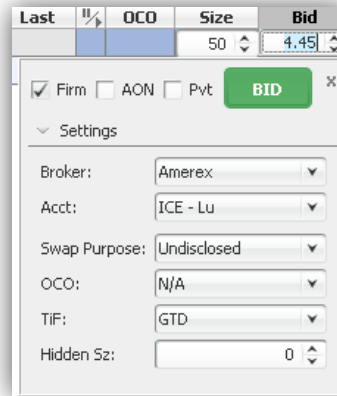


Figure 3.2: In-Grid Editor

3.2 Order Type Attributes

All order types have the following attributes:

Order Attribute	Description
Transaction ID	ID associated with order
Instrument ID	ID associated with the contract
Side	Bid or offer
Price	Order price
Size	Order quantity
Trader ID	ID of trader
Legal Entity ID	ID of trader's legal entity
Entered by ID	User ID of last update
Brokerage ID	ID of specified brokerage firm
Execution Path ID	ID of execution path (bilateral or specific clearing venue)
Firm/Held Status	Firm (executable on screen) or held (taken out of the market but not deleted)
Market Timestamp	Timestamp of order submission or last update of existing order
Last Updated Timestamp	Timestamp of the last update to any field on the order

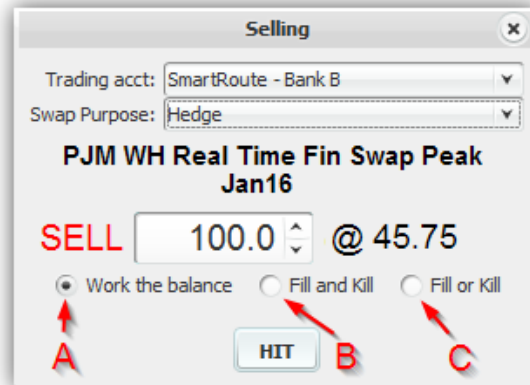
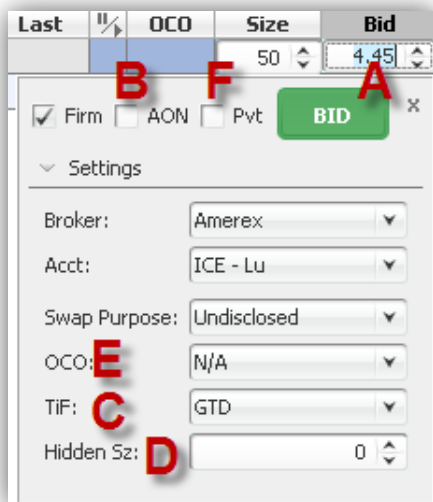
Table 3.1: Order Type Attribute Descriptions

3.3 Order Types Supported

The following order types are supported:

Order Type	Description
Limit	Bid or offer order submitted into the market (Figure 3.3, at A)
All or None (AON)	Limit order where only the entire submitted size is available for execution (i.e. no partial fill is allowed) (Figure 3.3, at B)
Time in Force (TiF)	Limit order which will be held within a specified time frame; all orders are held at end trading session (Figure 3.3, at C)
Hidden Size (Reserve Size)	Limit order which is comprised of two components: (1) a shown size; and (2) a hidden size. The shown size is a standard limit order while the hidden size is submitted as a new limit order when the initial shown size is fully executed (Figure 3.3, at D)
Work the Balance	Order submitted via hit/lift dialog where it directly executes an existing resting order and remaining size is placed as a resting limit order (Figure 3.4, at A)
Fill and Kill	Order submitted via hit/lift dialog where it directly executes an existing resting order and remaining size canceled (Figure 3.4, at B)
Fill or Kill	Order submitted via hit/lift dialog where it directly executes an existing resting order; if full size of submitted order is not meet, the order is canceled (Figure 3.4, at C)
Join-The-trade (JTT)	Order submitted during a timed JTT session which is anonymous to both brokers and the market; canceled upon expiration of the JTT session
Voice Trade	Trade executed over phone by a broker and entered through the Voice Trade dialog (not available for traders)

Table 3.2: Descriptions of Supported Order Options



3.4 Strategies

Various trading strategies can be implemented on EnergyMatch. Table 3.3 provides a description of each strategy.

Strategy	Description
Outright	One product with one period
Calendar Spread	One product with two periods; the first period is the premium leg, the second the discount leg (e.g. PJM Peak Cal15)
Calendar Strip	One product with more than one period; periods are combined (e.g. Quarter 1 2015 is a strip of January, February, and March 2015)
Product Spread	Two products with one period; the first product is the premium leg, the second the discount leg (e.g. PJM Peak Cal15/Cal16)
Product Spread- Calendar Strip	Two products with more than one period; the first product is the premium leg, the second the discount leg; periods are combined (e.g. Calendar 2015 is a strip of all twelve months in the year 2015)
Temporal Spread	Two products with two periods; the first product is the premium leg, the second the discount leg; the first period is the premium leg, the second the discount leg (e.g. buying the PEPCO/PJM Peak Cal15/Cal16 buys the PEPCO Peak Cal15 and the PJM Peak Cal15 legs, and sells the PJM Peak Cal15 and PEPCO Peak Cal16 legs)
Product Combination	Two products with one period; products are combined (e.g. PJM 7x24 is a combination of PJM Peak and PJM Off-Peak)
Product Combination Temporal Spread	Two product combinations with two periods; the first product combination is the premium leg, the second the discount leg; the first period is the premium leg, the second the discount leg (e.g. buying the PEPCO/PJM 7x24 Cal15/Cal16, which buys the PEPCO Peak Cal15, PEPCO Off-Peak Cal15, PJM Peak Cal16 and the PJM Off-Peak Cal16 legs, and sells the PJM Peak Cal15, PJM Off-Peak Cal15, PEPCO Peak Cal16, and PEPCO Off-Peak Cal16 legs)
Heat Rate	Two products that follow product spread strategy rules; power is the premium leg, Henry Hub gas is the discount leg; product is priced by dividing power by gas and size by MMBtu/day (e.g. PJM Heat Rate Peak Apr15: 11.525 bid for 10,000 MMBtu/day)

Table 3.3: Trading Strategies Implemented in EnergyMatch

3.5 Market Makers

Market makers provide liquidity to the markets offered in EnergyMatch by posting orders through the curve from spot month to longer term periods. They can manage orders through the GUI or through EnergyMatch's FIX API to download market data, uplink orders and receive drop-copies (refer to the EnergyMatch FIX Gateway Protocol Specification Guide for details).

3.6 Indication of Interest (IOI)

EnergyMatch supports a transparent indication of interest ("IOI") process on select product sets (Figure 3.5 and 3.6). Traders can send an anonymous IOI to all brokers and traders (Figure 3.6). All IOI responses are sent as standard limit orders visible to the entire market.

3.7 Request for Quote (RFQ)

Power and natural gas swaps trade on a vast amount of outrights and spreads, making it impossible to maintain all possible combinations of contracts in the system at any given time. Therefore, the Company allows users to create these contracts and survey market levels using the RFQ functionality. All RFQs are currently effected through voice trading.

The Company anticipates offering RFQ functionality that is fully automated in the near future. Such automated functionality will allow users to contact select market makers to generate tradable levels for the requested contracts. During a timed process, market makers can return bids, offers, or both. A trade occurs when requesters and market makers agree on a price level.

3.8 Order Matching/Execution

3.8.1 Depth Queue

Orders are ranked in the depth queue by price and time priority. Bids are first queued by ascending price level and offers, while queued by descending price level. Bids and offers at each price level are then queued in terms of the oldest orders at the top and newest orders at the bottom of the depth queue.

3.8.2 Execution

An order submitted with a price that is equal to or crosses an existing resting order(s) will match in accordance with the corresponding contra-side with the first price/time priority and credit validation rules.

4 Trading

4.1 Hours of Operation

EnergyMatch is open for trading Monday through Friday from 7:00 AM ET to 5:30 PM ET for the majority of markets. Some physical markets may have earlier closing times (e.g. 2:00 PM ET for ERCOT physical next day products). These times accommodate regional scheduling guidelines that dictate physical commodity deliveries.

4.2 Trade Controls

The Platform imposes price and size limits on a per product level with different markets having varying limits to prevent erroneous trade entries. When limits are exceeded, users are informed via pop-up notification and orders do not post. Traders are not permitted to trade with themselves or others within their institution.

Access to the Platform is contingent upon approval of the client as a Company Participant, Sponsored Access Firm or Registered Trader. The Company reserves the right to deny or suspend access as provided in the Company Rulebook.

Access to the Platform is also contingent upon good-standing status of Registered Traders within their respective companies. Designated user administrators of Participants and Sponsored Access Firms have the right to deny or suspend access to personnel under their umbrella. When requests for account suspension come via email, affected parties are notified before deactivation is processed.

In the event of a system-wide issue that jeopardizes the integrity of the platform, the EnergyMatch administrator will initiate emergency protocols that close all markets, thereby holding all orders.

4.3 Trading

Users can directly execute against existing resting orders in the market by Hitting or Lifting orders in the market. This can be done by clicking on the **H** or **L** in the grid next to the desired order (Figure 4.1) which will prompt the user with a hit/lift dialog (Figure 4.2). Clicking the Hit or Lift button on the hit/lift dialog will submit an opposing order to the trading engine.

PJM WH Real Time Fin Swap Peak	Peak	Cal15	*	Amerex	Sr	H	50	45.00	45.10	50	L	Sr	Amerex
PJM WH Real Time Fin Swap Peak	Peak	Jan16	*	Amerex	Sr	H	50	54.50	54.65	50	L	Sr	Amerex
PJM WH Real Time Fin Swap Peak	Peak	Jan16-Feb16	*	Amerex	Sr	H	50	57.80	57.90	50	L	Sr	Amerex
PJM WH Real Time Fin Swap Peak	Peak	Q116	*	Amerex	Sr	H	50	56.50	56.55	50	L	Sr	Amerex
PJM WH Real Time Fin Swap Peak	Peak	Cal16	*	Amerex	Sr	H	50	49.45	49.80	50	L	Sr	Amerex

Figure 4.1: Hit/Lift Workspace Buttons

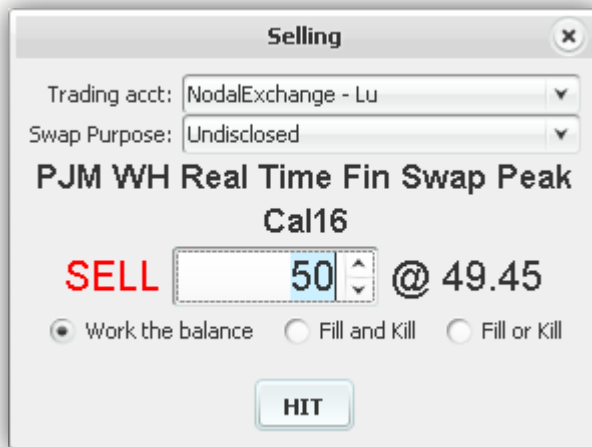


Figure 4.2: Pre-confirm Window for Hit/Lift Functionality

4.4 Trade Submission

4.4.1 Cleared Trades

Transactions that occur on the system are electronically routed through an API connection to the appropriate DCO.

4.4.2 Bilateral Trades

EnergyMatch also gives clients the option to transact bilaterally. Before bilateral trading can occur, client companies must designate credit administrators to configure the credit matrix to determine which companies receive credit, and the length of time that credit is extended. Direct orders are validated by the credit matrix, which determines whether counterparties have proper credit for trading.

4.5 [RESERVED]

4.6 Join-The-Trade Sessions

For certain swaps, executed trades that are posted to the market activity window of the Platform may trigger a Join the Trade session during which prices in the stack at the same level are auto-joined in this session. During such a session, the counterparties to the trade may have a short exclusivity period in which to work-up the size of the original trade, with other Participants then being invited to join the trade. The operation of the order book may or may not be suspended with respect to a swap that is subject to a join the trade session, but any pre-existing orders in the order book that are equal to or better than the price of a triggering transaction will be automatically included in the join the trade session. JTT orders are anonymous to other market participants, and a JTT session will run for a preset period of time based on the product configuration, and unfilled orders at the end of the session will remain in the order book until expiration or cancellation.

5 Trading Limits

5.1 Trading Limits within EnergyMatch

Risk administrators (“admins”) have the ability to configure a trading limits interface that allows them to set limits based on notional values. EnergyMatch supports three Risk Admin Types:

1. **FCM Risk Admin** – FCM risk admins are able to set limits for legal entities and/or individual traders which have an account with the FCM.
2. **Company Risk Admin** – Company risk admins are able to set limits for legal entities and/or for individual traders within their own firm.
3. **EnergyMatch’s System Admins** - EnergyMatch’s system admins can set limits on behalf of FCM and Company Risk Admins upon request.

Risk Limits

FCM Trading Account Overview Editable Risk Settings

Institution: Test2 FCM Trading Account: LEI - DCO - 12345678

FCM Trading Account Block *N* indicates no restrictions (infinite limit setting)

FCM Trading Account	Risk Group	Long Limit	Usage	Threshold Warning	Short Limit	Usage	Threshold Warning	Clip Size
LEI - DCO - 12345678	NG Risk	1000000	77000	85%	1000000	0	85%	140000

Trader Block *N* indicates no restrictions (infinite limit setting)

Trader	Risk Group	Long Limit	Usage	Threshold Warning	Short Limit	Usage	Threshold Warning	Clip Size
Test2 Trader1	NG Risk	500000	77000	85%	300000	0	85%	140000
Test2 Trader2	NG Risk	500000	0	85%	300000	0	85%	140000

Figure 5.1: Risk Limits for FCM Risk Admin Overview Screen

The trading limits interface has features that allow risk admins to tailor limits per legal entity or user. Below is a description of each section:

1. **FCM Trading Account Overview:** Allows risk admins to view all risk settings attributed to the selected FCM Trading Account
2. **Editable Risk Settings:** Allows risk admins to set limits per risk group per legal entity and/or user
3. **Institution Selector:** Toggles the view between different institutions
4. **FCM Trading Account Selector:** Toggles the view between Trading Accounts
5. **FCM Trading Account Block:** Displays or edits risk limits for the entire legal entity
 - a) FCM Trading Account- Specifies which FCM account the limits pertain to
 - b) Risk Group- Displays all risk groups available to the specified legal entity
 - c) Long Limit- Displays or edits the maximum notional value of the aggregate longs of the legal entity
 - d) Usage- Displays the total longs of all orders and trades belonging to the legal entity
 - e) Threshold Warning (Long)- Displays or edits the level at which a usage warning is displayed or emailed for aggregate longs
 - f) Short Limit- Displays or edits the maximum notional value of the aggregate shorts of the legal entity
 - g) Usage- Displays the total shorts of all orders and trades belonging to the legal entity

- h) Threshold Warning (Short)- Displays or edits the level at which a usage warning is displayed or emailed for aggregate shorts
 - i) Clip Size- Displays or edits the maximum volume allowed per order or trade
6. **Trader Block:** Displays or edits risk limits for individual traders
- a) Trader- Specifies to which trader the limits pertain
 - b) Risk Group- Displays all risk groups available to the trader
 - c) Long Limit- Displays or edits the maximum notional value of the aggregate longs of the trader
 - d) Usage- Displays the total longs of all orders and trades belonging to the trader
 - e) Threshold Warning (Long)- Displays or edits the level at which a usage warning is displayed or emailed for aggregate longs
 - f) Short Limit- Displays or edits the maximum notional value of the aggregate shorts of the trader
 - g) Usage- Displays the total shorts of all orders and trades belonging to the trader
 - h) Threshold Warning (Short)- Displays or edits the level at which a usage warning is displayed or emailed for aggregate shorts
 - i) Clip Size- Displays or edits the maximum volume allowed per order or trade

The limits applied to each trader will follow the set of limits with the most restrictive settings, internally or externally, for the legal entity as a whole or for individual traders.

5.2 System Trade Controls

The following system controls are implemented in EnergyMatch, in line with FIA's Risk Control Guidance:

1. **Erroneous Trade Entry:** The system imposes price and size limits on a per product level with different markets having varying limits to prevent erroneous trade entries. When limits are exceeded, users are informed via pop-up notification and orders do not post.
2. **Wash Trades:** The system does not allow clients to execute their own price or the price of another user with the same legal entity identifier (as such term is used in Part 45 of CFTC Regulations).
3. **Cancel-on-disconnect:** The system will cancel all live prices for users and APIs if a system outage, including but not limited to a full power failure at the hosting site or scheduled maintenance processes, is detected. Trading on the platform will be suspended for the length of the outage.
4. **Kill Switch:** The system has the ability to remove all users and orders and either temporarily or permanently restrict the users from accessing the system.
5. **Velocity Threshold:** The system will limit the ability of an API or other programmatic connection from attempting to execute prices at a velocity that exceeds an allowed threshold set by the Company from time to time.
6. **Halt Trading:** The system has the ability to halt trading activity. Live prices will be cancelled in the halted markets and further trading activity will be prohibited until the halt is lifted.

In the event of a system-wide issue that jeopardizes the integrity of the System, the Company reserves the right to implement its emergency procedures in accordance with the GFI Swaps Exchange, LLC Rulebook.

6. Trade Reporting

Details of all trades executed through EnergyMatch are reported to the specified swap data repository in accordance with CFTC Regulations.

7. Confirmations

EnergyMatch provides clients with a full range of trade reporting and confirmation services. Trade details are automatically reported in the EnergyMatch tradebook, a GUI application that provides all necessary trade details. The Platform is also fully integrated with robust middle-office systems of all supported brokerages which are used to deliver detailed trade confirmations to clients. Post-trade straight-through processing is available via our trade capture API and direct connectivity to multiple DCOs.

8. Market Data

EnergyMatch provides participants with easy access to data for all markets traded on screen. An industry standard FIX API is available for both trade and market data access.

9. Trade Reports

Orders can be queried via the EnergyMatch tradebook. This interface allows enabled customers to search via trade details such as date, Trade ID, commodity and region. There is an export feature that allows users to download queried reports as a .csv file. This lets them easily feed the reports back into their own proprietary interfaces.