

# Risk Management Tools User Manual

10/27/2014

Futures trading is not suitable for all investors, and involves the risk of loss. Futures are a leveraged investment, and because only a percentage of a contract's value is required to trade, it is possible to lose more than the amount of money deposited for a futures position. Therefore, traders should only use funds that they can afford to lose without affecting their lifestyles. And only a portion of those funds should be devoted to any one trade because they cannot expect to profit on every trade.

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Please submit user experience [feedback](#) about this help system.

# CME Group Risk Management Tools

CME Group Risk Management Tools is a browser-based application that is permissioned by account for access to the following: CME Globex Credit Controls (GC2), the Risk Management Interface (RMI), Deliverable Swap Futures (DSF) and Kill Switch. Depending on permissioning, administrators may not have access to all tools. Risk administrators are issued a SMART Click ID and password to log into the application. A [CME Clearing Member Firm \(CMF\)](#)<sup>1</sup> or exchange partner Clearing administrator authorizes access to the risk administrator for one or more of the following functions:

- [CME Globex Credit Controls \(GC2\)](#) - set pre-execution credit control limits on futures and options.
- [Risk Management Interface \(RMI\)](#) - block/prevent and unblock/allow orders and cross-requests from being entered or modified by Execution Firm accounts. Also, view and generate reports for blocked, unblocked, and cancelled orders.
- [Deliverable Swap Futures \(DSF\) Access Manager](#) - positively permission accounts so DSF products may be traded during the DSF pre-settlement blocked window.
- [Kill Switch](#) - provides a Globex Orders Kill function for the following levels: Legal Clearing Entity, Execution Firm and Sender Comp.

Access the Risk Management Tools login: <https://risktools.cmegroup.com/>

**Note:** Only versions of Chrome and Internet Explorer released in the most recent 12-month period will be certified and supported.

**Note:** If you receive a message from the browser indicating that this file is restricted, click the message and select **Allow Blocked Content**.

Learn about any of the following functions:

- [CME Globex Credit Controls \(GC2\)](#)
- [Risk Management Interface \(RMI\)](#)
- [DSF Access Manager](#)
- [Kill Switch](#)

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<sup>1</sup>The CME Group Class A Clearing Member Firm

## Obtain Access

Only authorized CME Group Clearing Firm or partner exchange Clearing Firm administrators will have the capability to authorize access for new risk administrators. Risk administrators will need a SmartClick ID to access CME Group Risk Management Tools.

### ▶ Obtain Access to CME Group Risk Management Tools:

1. A clearing firm or partner exchange clearing administrator completes the Exhibit C of the [Schedule 6](#) of the Customer Connection Agreement and faxes or [emails](#) the form to your [Global Account Manager](#).

**Note:** Executing Firms will need to have their clearing firm(s) submit a Schedule 6 Exhibit F on their behalf to access Kill Switch.”

3. The Global Account Manager verifies the paperwork and coordinates across CME Group departments to ensure processing of the request.
4. The Global Account Manager contacts the clearing firm or partner exchange clearing firm when the new user has been granted access.


## Login and Logout

If you forget a username or password, request for it to be retrieved through the SMART Click online application.

The account is locked out after more than five login attempts, and administrators must contact the CME Group [Global Command Center \(GCC\)](#) for a username and password reset.

### Additional SMARTClick information:

SMARTClick instructions at: <http://www.cmegroup.com/tools-information/webhelp/smart-click/Default.html>.

**Note:** Click the following link to view a video that describes the SMART Click registration and access process:  [SMART Click Video](#)

**Note:** For SMART Click support and troubleshooting, contact [Enterprise Application & System Entitlements \(EASE\)](#). If changes are required to your SMARTClick password or ID, access [SMARTClick](#) with your current login information, or, if you have forgotten your ID or password, follow the appropriate links on the page.

## Login

### ▶ To login:

Access CME Group Risk Management Tools at <https://risktools.cmegroup.com/> using the SMART Click ID and password.


## Logout

Closing the CME Group Risk Management Tools window will NOT terminate the session. Risk Administrators must log out of the application.

### ▶ To log out:

From the **Risk Management Tools** window, click **Logout**.

## Additional Resources

- [Client Systems Wiki](#)
-  [Risk Management Video](#)

## What's New

The following content has been updated or added to the Risk Management Tools Help system:

Date	Author	Topic	Description
10/27/14	JK	1. <a href="#">CME Group Risk Management Tools</a>	1. Updated Login section with SmartClick update information.
4/28/14	JK	1. <a href="#">Globex Credit Controls</a> 2. <a href="#">Enforcing Kill Switch</a>	1. Exposure limits added to newly created firms or exchanges will take effect at 16:45 CST each weeknight or upon Sunday start-up. 2. Added: The SenderCompID (FIX Tag 49) is made up of Session ID (first three characters), Firm ID (second three characters), and Fault Tolerance (last character).
4/15/14	JK	All	Updated links and edited to meet Help standards.
3/2/14	JK	<a href="#">Set Exposure Limits and/or Max Quantity Limits</a>	Updates for Exposure Limit: <ul style="list-style-type: none"> <li>• Minimum Exposure Limit level is \$0.5M.</li> <li>• Increase from \$0.5M in \$0.1M increments.</li> <li>• Only one decimal place to the right is recognized.</li> </ul>
12/13/13	JK	<a href="#">CME Group Risk Management Tools</a>	Roles of RMI Risk Admin and GC2 Risk Admin are combined.
10/18/13	JK	<a href="#">DSF Access Manager</a> (new) <a href="#">Kill Switch</a> (new) Partner Exchange report	Added content for DSF Access Manager and Kill Switch topics. Added Kill Switch Reports. Added Partner Exchange report. Updated images on various pages.
8/26/13	JK	<a href="#">CME Globex Credit Controls (GC2)</a>	Updated "Newly created execution firms..." and "Newly added exchanges..." bullet points.
6/21/13	JK	<a href="#">CME Globex Credit Controls</a> <a href="#">See "Dynamic Clip Size" Advanced Settings</a>	Updated text / table header on CME GC2 page (GC2 Features / Time Frame for Changes) Updated text on Dynamic Clip Size page (Prior to Trading). Updated images on Advanced Settings page.
4/30/13	NU	<a href="#">Regroup Exchanges CME Globex Credit Controls (GC2)</a>	Updated warning that required changes are effective upon the next Sunday start-up.
8/11/12	NU	<a href="#">Basics of Position Calculations</a> <a href="#">Instruction History</a> <a href="#">RMI Reports</a> Global	Updated example. Added Filter functionality. Added topic. Streamlined topics and expanded What's New section.
3/23/12	NU	General/ <a href="#">Instruction History</a>	<ul style="list-style-type: none"> <li>• Updated RMI sections to rename Pending Block tab to Create Block tab.</li> <li>• Added Export to Excel description to RMI Instruction History.</li> </ul>

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Date	Author	Topic	Description
2/24/12	NU	General/ <a href="#">Risk Management Interface Basics</a>	<ul style="list-style-type: none"><li>• Incorporated Risk Management Interface (RMI) functionality, including a new RMI section.</li><li>• The Risk Management Tools GUI was renamed from CME Globex Credit Controls to now support both CME Globex Credit Controls (GC2) and a new Risk Management Interface (RMI). All graphics updated to reflect renaming of Credit Controls tab.</li></ul>



# CME Globex Credit Controls (GC2)

CME Globex Credit Controls (GC2) is a front-end application that provides pre-execution risk controls that enable Clearing Firm or Partner Exchange Clearing Firm risk administrators to set exposure limits for order and trade activity transacted on CME Globex and cleared by CME Clearing. The Clearing firm or partner exchange Clearing firm risk administrators can choose a set of real-time actions to follow if specified limits are breached, including e-mail notifications, order blocking, and order cancellation.

GC2 Features include:

- [Exposure Limits](#) - set Exposure Limits for Futures and Options. GC2 exposure limits are applied to:
  - Exposure Limit Futures Long
  - Exposure Limit Futures Short
  - Exposure Limit Options Long
  - Exposure Limit Options Short

The Exposure Limit entered in the Exposure Limit field is applied to both Long and Short.

- [Max Quantity Limits](#) - in addition to Exposure Limits, the risk administrator can enter the optional Max Quantity Limit Clip Size for Buy/Sell Futures and/or Buy/Sell Options for the grouping.
- [Open and Filled Position Calculations](#) - open and filled positions are calculated for a product complex per Executing Firm ID / Exchange group.
- [Advanced Settings](#) - used to set a reference margin rate.
- Newly created execution firms will have a "0" exposure limit. This means that the firm is blocked. The clearing firm admin must enter a value to enable trading.
- Newly added exchanges will have a "0" exposure limit and will appear in a separate tab. This means that the firm is blocked for the newly added exchanges. The clearing firm admin must enter a value to enable trading.
- Exposure limits added to newly created firms or exchanges will take effect at 16:45 CST each weeknight or upon Sunday start-up.
- If the customer wishes to re-group the exchanges, the change will take place upon the next Sunday start-up.

For detailed information about GC2 calculations, see:

- [Dynamic Clip Size](#)
- [Position Calculations](#)

## Time Frame for Changes

The following table summarizes when various types of changes take effect for CME Globex Credit Controls (GC2).

- Clearing firms have the ability to apply exposure limits to Executing Firm IDs created on or transferred mid-week. Limits are applied by 16:45 CST.
- Filled positions are not carried over between trading days and are reset to zero at 16:30 Central Standard Time (CST).

Type of Change	Realtime	16:30-16:45 each week night or upon Sunday start-up	Next Sunday Start-up
Exposure Limits	X		
Max Quantity Limits	X		
Executing Firm ID / Exchange Regroupings			X
New Firms		X	
Clearing Mapping Relationships		X	

## GC2 Window

The GC2 window incorporates Execution Firm ID / Exchange group functionality, whereby predefined groups display on the tabs and the associated credit control parameters display for the selected active tab. The GC2 Risk Administrator uses this window to establish the parameters for CME Globex Credit Controls.

▶ **To access this screen:**

1. [Login](#) to GC2.
2. From the **GC2** tab, click **Manage Limits**.

The screenshot shows the 'GC2 - Manage Limits' interface. At the top, there's a navigation bar with 'GC2', 'RMI', 'DSF Access Manager', 'Kill Switch', 'Reports', and 'Logout'. Below this, the 'Legal Clearing Entity' and 'Execution Firm' are selected. The main area is divided into several sections:

- Exchange Grouping:** Shows 'Credit Controls Management' with a 'Block Trading' button and a 'Kill Trading' button.
- Optional Maximum Quantity Limits:** Includes fields for 'Buy' and 'Sell' limits in USD millions.
- Current Positions:** A table showing 'Fut - Long', 'Fut - Short', 'Opt - Long', and 'Opt - Short' with columns for 'Open', 'Filled', and 'Total'.
- Notifications:** A section for setting alert percentages (50%, 60%, 70%, 80%, 90%) and email addresses.
- Credit Control Alerts:** A section for defining alert thresholds.

At the bottom, there are 'Save' and 'Cancel' buttons.

**To select a firm:**

From the **GC2** tab, select the **Legal Clearing Firm** and **Execution Firms** from the drop-down lists.

This window has four sections.

Window Section	Description
<b>Credit Controls Management Area</b>	<p>The GC2 Risk Administrator <b>must</b> enter the appropriate Exposure Limit for Futures and Options for the Executing Firm ID / Exchange group.</p> <p><b>Note:</b> Uncheck the No Max Limit checkbox to enter Max Quantity Limits.</p> <p>In addition to the Exposure Limits, the GC2 Risk Administrator can enter the Max Quantity Limit Clip Size for Buy/Sell Futures or Buy/Sell Options for the group.</p> <p><b>Note:</b> If both Exposure Limits and Max Quantity Limits are set, the most conservative value is used.</p> <p>The Exposure Limit for futures and options and Max Quantity Limit Clip Size must be set for each respective Executing Firm ID / Exchange group.</p>
<b>Current Position Area</b>	<p><b>Total Futures Long</b> = Sum of all weighted quantity open long futures orders + Sum of all weighted long fills – Sum of all weighted short fills.</p> <p><b>Total Futures Short</b> = Sum of all weighted quantity open short futures orders + Sum of all weighted short fills – Sum of all weighted long fills</p> <p><b>Total Options Long</b>= Sum of all weighted quantity open long options orders + Sum of all weighted long fills – Sum of all weighted short fills.</p> <p><b>Total Options Short</b> = Sum of all weighted quantity open short options orders + Sum of all weighted short fills – Sum of all weighted long fills.</p> <p><b>Note:</b> Click the Refresh button to update the Current Positions area.</p>
<b>Notifications</b>	<p>This area identifies the 3 threshold percentages when notifications occur. The area also identifies the email address(es) of the recipient(s) of the alerts when the 100% threshold is reached. These percentages are selected by the GC2 Risk Administrator.</p> <p><b>Note:</b> At least one email address must be entered per Executing Firm ID / Exchange group.</p>
<b>Credit Control Alerts</b>	<p>Displays the alerts based on the current position(s) and threshold percentage.</p>

**Note:** In addition, this window has a **Kill Trading** button, an emergency switch that **blocks all subsequent order entry at the Legal Clearing Entity and Executing Firm ID.**

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## Set Up the Credit Control Parameters

To set up CME Globex Credit Controls, follow these steps:

1. [Select the Firm.](#)
2. [Manage the Executing Firm ID / Exchange Groupings.](#)
3. [Enter the Exposure Limits and/or Max Quantity Limits.](#)
4. [Set Notification Percentages.](#)
5. [Add, Update or Delete an Email Address for Notifications.](#)

Click the following links to learn more:

- [Dynamic Clip Size](#)
- [Position Calculations](#)

## Set Exposure Limits and/or Max Quantity Limits

There are two sections to this panel. The GC2 Risk Administrator may enter an Exposure Limit for futures Long/Short and options Long/Short and/or Max Quantity Limit for both Buy/Sell Futures and Buy/Sell Options.

**To Modify the Exposure Limit:**

1. Enter the **Futures and Options Exposure Limit.**

<span>{ CME }{ DME }{ KCB }{ MGE }</span> <span style="background-color: #cccccc;">{ CBT }{ COMEX }{ HYMEX }</span>			
Credit Controls Management		Enter 0 to block order entry	
<b>Futures</b>	Exposure Limit \$ <input type="text" value="3"/> (in USD millions)	Max Quantity Limit Buy <input type="text" value=""/> (in Contracts)	No Max Limit <input checked="" type="checkbox"/>
		Sell <input type="text" value=""/> (in Contracts)	<input checked="" type="checkbox"/>
<b>Options</b>	Exposure Limit \$ <input type="text" value="2"/> (in USD millions)	Max Quantity Limit Buy <input type="text" value=""/> (in Contracts)	No Max Limit <input checked="" type="checkbox"/>
		Sell <input type="text" value=""/> (in Contracts)	<input checked="" type="checkbox"/>

**Note:** Minimum Exposure Limit level is \$0.5M. Increase from \$0.5M in \$0.1M increments.

**Note:** Exposure Limit field recognizes only one decimal point to the right (for example, 1.3M).

2. Click **Save** if there are no other changes.

**To Modify the Max Quantity Limit:**

1. Uncheck the **No Max Limit** checkboxes.
2. Enter the **Buy Max Quantity Limit for Futures.**
3. Enter the **Sell Max Quantity Limit for Futures.**
4. Enter the **Buy Max Quantity Limit for Options.**
5. Enter the **Sell Max Quantity Limit for Options.**

<span>{ CME }{ DME }{ KCB }{ MGE }</span> <span style="background-color: #cccccc;">{ CBT }{ COMEX }{ HYMEX }</span>			
Credit Controls Management		Enter 0 to block order entry	
<b>Futures</b>	Exposure Limit \$ <input type="text" value="3"/> (in USD millions)	Max Quantity Limit Buy <input type="text" value="100"/> (in Contracts)	No Max Limit <input type="checkbox"/>
		Sell <input type="text" value="50"/> (in Contracts)	<input type="checkbox"/>
<b>Options</b>	Exposure Limit \$ <input type="text" value="2"/> (in USD millions)	Max Quantity Limit Buy <input type="text" value="50"/> (in Contracts)	No Max Limit <input type="checkbox"/>
		Sell <input type="text" value="25"/> (in Contracts)	<input type="checkbox"/>

6. Click **Save** when finished.

## Advanced Settings

▶ To set advanced settings:

1. Click **Advanced Settings** on the GC2 window.

<span>{ CME }</span> <span>{ DME }</span> <span>{ KCB }</span> <span>{ MGE }</span> <span>{ CBT }</span> <span>{ COMEX }</span> <span>{ HYMEX }</span>			
<b>Credit Controls Management</b>		Enter 0 to block order entry	
<b>Futures</b>	Exposure Limit \$ <input type="text" value="3"/> (in USD millions)	Max Quantity Limit Buy <input type="text" value="100"/> (in Contracts)	No Max Limit <input type="checkbox"/>
		Sell <input type="text" value="50"/> (in Contracts)	<input type="checkbox"/>
<b>Options</b>	Exposure Limit \$ <input type="text" value="2"/> (in USD millions)	Max Quantity Limit Buy <input type="text" value="50"/> (in Contracts)	No Max Limit <input type="checkbox"/>
		Sell <input type="text" value="25"/> (in Contracts)	<input type="checkbox"/>
<a href="#">Advanced Settings</a>			

The Advanced Settings pop-up displays.

Advanced Settings	
<b>Futures Margin Rate</b>	<input type="text" value="Dynamic Margin Rate"/> ▼
<b>Options Margin Rate</b>	<input type="text" value="Dynamic Margin Rate"/> ▼
<input type="button" value="OK"/> <input type="button" value="Cancel"/>	

2. Select the **Futures Margin Rate** from the drop-down list.

A screenshot of a software interface showing a drop-down menu for 'Dynamic Margin Rate'. The menu is open, displaying a list of options categorized into several groups. The categories and their items are: **Interest Rates** (Eurodollars, Bonds, 10 yrs., 5 yrs., 2 yrs.), **Equities** (S&P, E-mini S&P, E-mini Nasdaq, E-mini Dow), **Currencies** (Euro, Yen, Pound, Franc), **Commodities** (Corn, Soybeans, CBT Wheat), **Energy** (NYMEX Crude, NYMEX Natural Gas, COMEX Gold), and **BMD Products** (FCPO - Crude Palm Oil, FKLI - KL Index Futures, FKB3 - 3M KLIBOR). The 'Dynamic Margin Rate' option is currently selected and highlighted in blue.

3. Select the **Options Margin Rate** from the drop-down list.
4. Click **Save** when finished.

 **To set notification percentage:**

1. Select the **Notification percentages** for up to **three** levels.

A screenshot of a 'Notifications' dialog box. The title bar reads 'Notifications'. Below the title bar, there is a header section with the text 'Please select up to three percentages'. Underneath, there is a list of percentage options with checkboxes:  50%,  60%,  70%,  80%, and  90%.

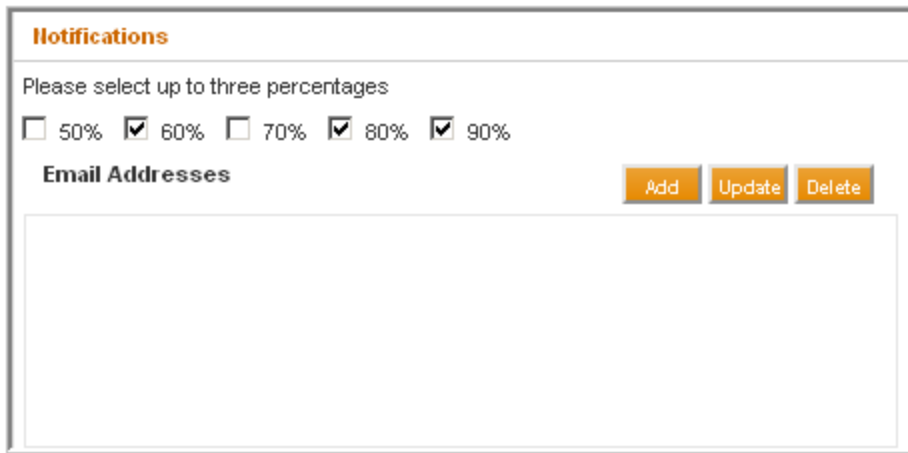
2. Click **Save** when finished.

## Add, Update or Delete Email Address for Notifications

GC2 allows you to manage email addresses to be notified when the percentage of exposure limit is reached.

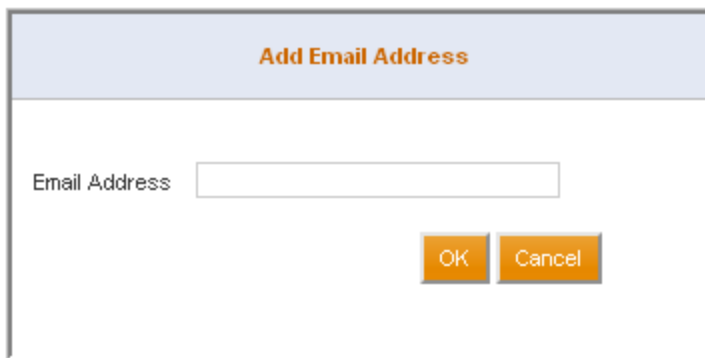
▶ **To add an Email address:**

1. Select up to three percentage threshold check boxes.



The screenshot shows a window titled "Notifications". Below the title, it says "Please select up to three percentages". There are five checkboxes: 50% (unchecked), 60% (checked), 70% (unchecked), 80% (checked), and 90% (checked). Below this is a section titled "Email Addresses" with three buttons: "Add", "Update", and "Delete". The "Email Addresses" section is currently empty.

2. Click **Add** .



The screenshot shows a dialog box titled "Add Email Address". It has a text input field labeled "Email Address" and two buttons: "OK" and "Cancel".

3. Type the **Email Address** and click **OK**.



The screenshot shows the "Notifications" window again. The "Email Addresses" section now contains one entry: "JEnglish@xyz.org" with an unchecked checkbox to its left. The "Add", "Update", and "Delete" buttons are still present.

4. Click **Save** when finished.

Proceed to one of the following procedures to modify the email address:

- [Update an Email Address](#)
- [Delete an Email Address](#)



## To Update an Email Address

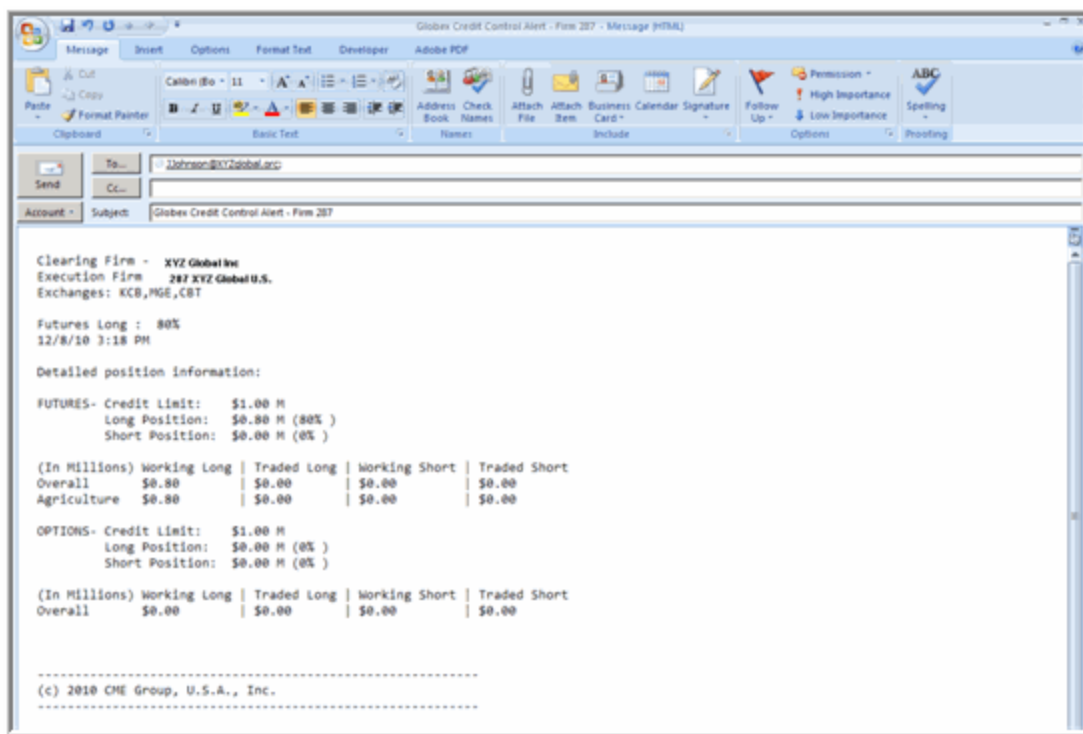
1. Select the check box next to the **Email Address** that requires updating.
2. Click **Update**.
3. Modify the email Address and click **OK**.
4. Click **Save** when finished.

## To Delete an Email Address

1. Select the check box next to the **Email Address** that needs to be deleted.
2. Click **Delete**.
3. Click **OK**.
4. Click **Save** when finished.

## Email Notification Messages

The following figure displays an example email notification from CME Group.



## Manage Executing Firm ID - Exchange Groups

Regroup exchanges, modify a group, or set up a new group.

[Regroup exchanges](#)

[Modify a group](#)

[Set up a new group](#)

Use the Regroup Exchanges function to create or modify an Executing Firm ID/Exchange group.

▶ **To navigate to the Regroup Exchanges Window:**

1. From the **GC2** menu, click **Regroup Exchanges**.

**Warning: If modifications are required, changes are effective upon the next Sunday start-up.**

The two current groups in the figure correspond to the tabs on the GC2 main window.

2. From this window, the GC2 Risk Administrator can modify or set up a new group. Select the appropriate link:
  - [To Modify a Group](#)
  - [To Set Up a New Group](#)

## Modify a Group

▶ **To modify a group:**

1. Drag the exchange button to a different group. In this example, the MGE exchange was moved to the second group.

**GC2 - Regroup Exchanges**

Legal Clearing Entity: XYZ Global

Execution Firm: 287 XYZ Global US

\* "Current Group" represents exchange groupings as they currently exist. Click the "New Group" button to create a new grouping container.  
\* Drag exchanges and Drop into new or existing containers to create new exchange groupings.  
\* Click "Next" to continue.

**Current Group**  
{ CME }  
{ CBT }

**Current Group**  
{ COMEX }  
{ KCB }  
{ NYMEX }  
{ MGE }

Drag MGE exchange to the second

New Group      Next >>

2. Click **Next** when all exchanges have been moved to the correct group(s).
3. Verify or modify the following for the Current Group:
  - Exposure Limits for Futures and Options
  - Max Quantity Limit Buy and Sell for Futures and Options.
  - Notification Percentages
  - Email Addresses for Notifications

**GC2 - Regroup Exchanges**

Legal Clearing Entity: XYZ Global  
 Execution Firm: 287 XYZ Global US

\* New groupings are represented in Tabs below. Please ensure all exchange groups have valid and realistic limits set.  
 \* Use 'Next Tab' and 'Previous Tab' buttons to navigate through tabs.  
 \* Click 'Save' to save all changes. Click 'Cancel' to reset values.

{ CME } { CBT } { COMEX } { KCB } { NYMEX } { MGE }

Credit Controls Management		Enter 0 to block order entry		Notifications
Futures	Exposure Limit \$ 123 (in USD millions)	Max Quantity Limit Buy (in Contracts)	No Max Limit <input checked="" type="checkbox"/>	Please select up to three percentages <input type="checkbox"/> 50% <input checked="" type="checkbox"/> 60% <input type="checkbox"/> 70% <input type="checkbox"/> 80% <input checked="" type="checkbox"/> 90%  Email Addresses TEST@TEST1.COM <input type="button" value="Add"/> <input type="button" value="Update"/> <input type="button" value="Delete"/>
		Sell (in Contracts)	<input checked="" type="checkbox"/>	
Options	Exposure Limit \$ 10 (in USD millions)	Max Quantity Limit Buy (in Contracts)	No Max Limit <input checked="" type="checkbox"/>	
		Sell (in Contracts)	<input checked="" type="checkbox"/>	

Cancel all working orders at 100% of the limit [Advanced Settings](#)

4. Click Next Tab.

GC2   RMI   Reports   Logout

**GC2 - Regroup Exchanges**

Legal Clearing Entity: XYZ Global  
 Execution Firm: 287 XYZ Global US

\* New groupings are represented in Tabs below. Please ensure all exchange groups have valid and realistic limits set.  
 \* Use 'Next Tab' and 'Previous Tab' buttons to navigate through tabs.  
 \* Click 'Save' to save all changes. Click 'Cancel' to reset values.

{ CME } { CBT } { COMEX } { KCB } { NYMEX } { MGE }

Credit Controls Management		Enter 0 to block order entry		Notifications
Futures	Exposure Limit \$ 12378 (in USD millions)	Max Quantity Limit Buy (in Contracts)	No Max Limit <input checked="" type="checkbox"/>	Please select up to three percentages <input type="checkbox"/> 50% <input checked="" type="checkbox"/> 60% <input type="checkbox"/> 70% <input checked="" type="checkbox"/> 80% <input checked="" type="checkbox"/> 90%  Email Addresses TEST2@TEST2.COM TEST2@TEST2.COM TEST@TEST.COM TEST@TEST1.COM <input type="button" value="Add"/> <input type="button" value="Update"/> <input type="button" value="Delete"/>
		Sell (in Contracts)	<input checked="" type="checkbox"/>	
Options	Exposure Limit \$ 10 (in USD millions)	Max Quantity Limit Buy (in Contracts)	No Max Limit <input checked="" type="checkbox"/>	
		Sell (in Contracts)	<input checked="" type="checkbox"/>	

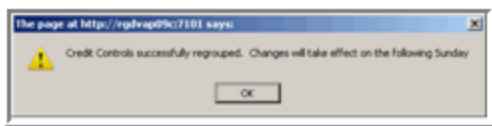
Cancel all working orders at 100% of the limit [Advanced Settings](#)

5. Verify or modify the following for the Current Group:
  - Exposure Limits for Futures and Options
  - Max Quantity Limit Buy and Sell for Futures and Options
  - Notification Percentages
  - Email Addresses for Notifications

**Note:** For every Executing Firm ID / Exchange tab, there **must be Exposure Limits and/or Max Quantity Limits set**. In addition, there must be at least **one email address for notification alerts**.

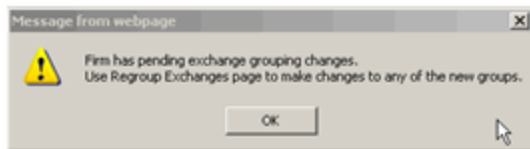
6. Click **Add** in the Email Addresses area and enter the email address.
7. Click **Save** when finished.

GC2 displays a message that the modifications were successfully made.



8. Click **OK**.
9. Click **OK** on the GC2 window.

The following message displays.



10. Click **OK** to respond to this message.

**Note:** Click the **Cancel** button to revert to the previous settings.

## Set Up a New Group

### ▶ To set up a new group:

1. Navigate to the [Regroup Exchanges](#) window.
2. Click the **New Group** button at the bottom of the window.

Legal Clearing Entity: XYZ Global

Execution Firm: 287 XYZ Global US

\* 'Current Group' represents exchange groupings as they currently exist. Click the 'New Group' button to create a new grouping container.  
 \* Drag exchanges and Drop into new or existing containers to create new exchange groupings.  
 \* Click 'Next' to continue.

Current Group ( CME )  
 ( CBT )  
 ( COMEX )  
 ( DME )  
 ( KCB )  
 ( MGE )  
 ( NYMEX )

Current Group

New Group Next >>

3. Drag the appropriate exchanges from the Current Group (first) to the New Group (second). In this example, **COMEX**, **KCB** and **MGE** were moved to the New Group.

Legal Clearing Entity: XYZ Global

Execution Firm: 287 XYZ Global US

\* 'Current Group' represents exchange groupings as they currently exist. Click the 'New Group' button to create a new grouping container.  
 \* Drag exchanges and Drop into new or existing containers to create new exchange groupings.  
 \* Click 'Next' to continue.

Current Group ( CME )  
 ( CBT )  
 ( DME )  
 ( NYMEX )

Current Group ( COMEX )  
 ( KCB )  
 ( MGE )

New Group Next >>

4. Click the **Next** button.

5. Verify or modify the following for the **Current Group (first)**:
  - Exposure Limits for Futures and Options
  - Max Quantity Limit Buy and Sell for Futures and Options
  - Notification Percentages
  - Email Addresses for Notifications
6. Click the **Next** button when finished.
7. Enter the following for the **New Group (second)**:
  - Exposure Limits for Futures and Options
  - Max Quantity Limit Buy and Sell for Futures and Options
  - Notification Percentages
  - Email Addresses for Notifications

**Warning:** You are **required to enter Exposure Limits and/or Max Quantity Limits**. In addition at least **one email address must be entered** for the notification alerts.

8. Click **Save** when finished or click **Cancel** to revert to the existing group settings.  
GC2 displays a message that the modifications were successfully made.
9. Click **OK** to respond to this message.
10. Click **Next Tab** when finished.

## GC2 Reports

### To run a GC2 report:

From the CME Group Risk Management Tools window, point to **Reports**, then **GC2**.

The screenshot shows the CME Group Risk Management Tools interface. At the top, there is a header with the CME Group logo and the text "Risk Management Tools". To the right of the header, contact information is provided: "CME Global Command Center", "North America : (+1) 312-456-2391", "Europe : +44-20-7623-4708", and "Asia : +65-6223-1357". Below the header is a navigation bar with tabs for "GC2", "RMI", "DSF Access Manager", "Kill Switch", "Reports", and "Logout". The "Reports" tab is selected, and a sub-menu is open showing options for "GC2", "RMI", and "Kill Switch". The "GC2" option is selected, and a further sub-menu is open showing options for "Limits by Legal Clearing Entity", "Max Positions by Exchange Firm", and "Partner Exchange". Below the navigation bar, the "GC2 - Manage Limits" page is displayed. It contains a message: "Unable to retrieve current position info for the selected firm and/or exchange(s). Please contact the CI". Below this message are two dropdown menus: "Legal Clearing Entity" (set to "XYZ GLOBAL") and "Execution Firm" (set to "000 - AN EXECUTION FIRM").

Select one of the following options:

- [Limits by Legal Clearing Entity](#)
- [Max Positions by Exchange Firm](#)
- [Partner Exchange](#)

### Limits by Legal Clearing Entity

The screenshot shows the "GC2 Reports - Limits by Legal Clearing Entity" page. It features a dropdown menu for "Legal Clearing Entity" with the text "-- Select a Legal Clearing Entity --". At the bottom right of the page, there is a "Run Report" button.

### To run a Limits by Legal Clearing Entity report:

1. Select **Reports > GC2 > Limits by Legal Clearing Entity**.
2. From the **Legal Clearing Entity** drop-down box, select a firm.
3. Click **Run Report**.
4. Depending on the browser being used, the file either automatically downloads or a dialog box displays with open / save file options. If dialog box displays, take actions as appropriate.

### Max Positions by Exchange Firm

The screenshot shows the "GC2 Reports - Max Positions by Exchange Firm" page. It features two dropdown menus: "Legal Clearing Entity" (set to "-- Select a Legal Clearing Entity --") and "Execution Firm" (set to a shaded box). Below these dropdowns are two input fields for "From Date" and "To Date". At the bottom right of the page, there is a "Run Report" button.

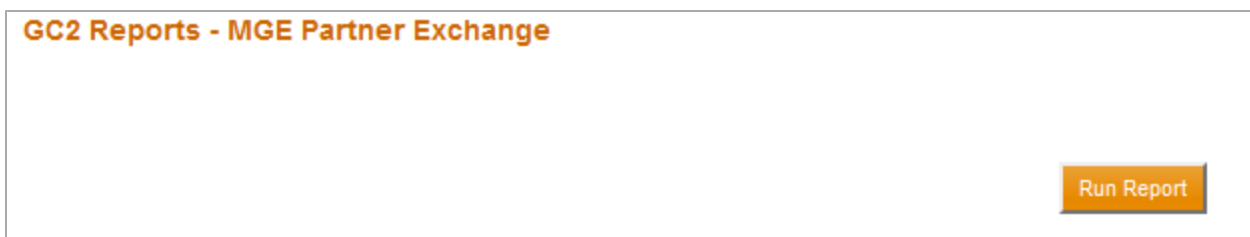


▶ **To run a Max Postions by Exchange Firm report:**

1. Select **Reports > GC2 > Max Positions by Exchange Firm**.
2. Select the **Legal Clearing Entity** and the **Execution Firm**.
3. Enter the **From Date** and **To Date**.
4. Click **Run Report**.
5. Depending on the browser being used, the file either automatically downloads or a dialog box displays with open / save file options. If dialog box displays, take actions as appropriate.

## Partner Exchange

Generates the partner exchange limits that have been set.



▶ **To run a Partner Exchange report:**

1. Select **Reports >GC2> Partner Exchange >**, and then select one of the following:
  - **BMD**
  - **KRX**
  - **MGE**
2. Click **Run Report**.
3. Depending on the browser being used, the file either automatically downloads or a dialog box displays with open / save file options. If dialog box displays, take actions as appropriate.

## Dynamic Clip Size

Credit controls are enforced by means of maximum allowable order, known as "clip size." Clip size is dynamically calculated based on real-time fill and open order calculations and a weighted average margin rate.

**Note:** In addition to dynamic clip size, the Risk Administrator has the ability to set a static maximum quantity limit. If the GC2 Risk Administrator sets this value, GC2 compares its dynamic calculation against the static limit, and enforces the smaller value, as shown in this [example](#).

### Prior to Trading

At the beginning of the weekly trading session, prior to market open, GC2 requires an **Initial Margin Reference Rate** to calculate an initial clip size.

For this calculation, if the GC2 Risk Administrator has set the reference margin rate, this value will be used for the initial clip size calculation; otherwise, GC2 will use a default reference margin rate from a highly liquid product, for example, Eurodollars.

The initial clip size is calculated as:

**(Exposure Limit - Current Calculated Position in USD) / Risk Administrator selected Reference Margin Rate (or default Reference Margin Rate)**

### During Trading

During trading, GC2 calculates a **Weighted Average Margin Rate** based on the order/trade activity for the related Legal Clearing Entity. The larger value of either the Weighted Average Margin Rate or the selected Margin Rate is used to calculate the dynamic clip size, resulting in the selection of whichever generates the smaller clip size.

**Clip Size = (Exposure Limit - Current Calculated Position in USD) / Risk Administrator selected Margin Rate**

OR:

**Clip Size = (Exposure Limit - Current Calculated Position in USD) / Weighted Reference Margin Rate**

**Tip:** Weighted Reference Margin Rate =  $(\sum \text{Quantity per instrument} \times \text{Rate per Instrument}) / (\sum \text{Quantity per instrument})$

## Dynamic Clip Size Parameters

GC2 Calculates dynamic clip size according to the following formulae where:

Dynamic Clip Size	=	Exposure Limit Futures Long	- (minus)	<b>Total Futures Long Margin</b> Total Futures Long Margin = sum of long futures order margins + sum of long futures fill margins – sum of short futures fill margins	/ (divided by)	<b>Futures Long Weighted Avg Margin Rate</b> Total Futures Long Weighted Avg. Margin Rate = Weighted average sum of open long futures orders + long futures fills - short futures fills
		Exposure Limit Futures Short		<b>Total Futures Short Margin</b> Total Futures Short Margin = sum of short futures order margins + sum of short futures fill margins – sum of long futures fill		<b>Futures Short Weighted Avg Margin Rate</b> Total Futures Short Weighted Avg. Margin Rate = Weighted average sum of open short futures orders + short futures

		margins	fills – long futures fills
Exposure Limit Options Long		<b>Total Options Long Margin</b> Total Options Short Margin = sum of short options order margins + sum of short options fill margins – sum of long options fill margins	<b>Options Long Weighted Avg Margin Rate</b> Total Options Long Weighted Avg. Margin Rate = Weighted average sum of all open long option orders + long option fills – short option fills
Exposure Limit Options Short		<b>Total Options Short Margin</b> Total Options Short Margin = sum of short options order margins + sum of short options fill margins – sum of long options fill margins	<b>Options Short Weighted Avg Margin Rate</b> Total Options Short Weighted Avg. Margin Rate = Weighted average sum of all open short options orders + short option fills – long option fills

For Option Put orders, the side of that order is reversed for clip size position calculations and static clip sizes:

- Long calls and Short puts are both applied against long option position calculations
- Short call and Long puts are applied toward short option position calculations

**Example:**

The GC2 Risk Administrator sets the options long max qty limit=200, options short limit=100  
 Incoming new buy order 105 put options.  
 The order is *rejected* because it exceeds the options short limit of 100.

## Dynamic Clip Size Example

This example depicts a \$1,000,000 exposure limit distributed across three products.

### Prior to Trading

Assume:

- No reference margin rate selected by GC2 Risk Administrator. GC2 default is the Eurodollar Futures initial margin rate of \$750.
- GC2 Risk Administrator sets a Max Quantity Limit (clip size) of 100  
 Initial clip size = \$1,000,000 / 750 (\$/contract)  
 = 1333 contracts

### During Trading

When trading activity begins, GC2 calculates the dynamic clip size according to quantity and margin rate per product.

Instrument	Quantity	Total Quantity	Instrument Margin Rate	Total Transaction Margin	Total Long Margin	Long Weighted Avg Margin Rate	GC2 Dynamic Clip Size	Risk Admin Max Limit
Initial Clip Size Calculation							$(1,000,000 - 0) / 750 =$ <b>1333</b>	
Eurodollar futures	10	10	\$750	\$7500	\$7500	$7500 / 10 =$ 750	$(1,000,000 - 7500) / 750 =$ <b>1323</b>	
e-Mini Dow \$5 futures	2	12	\$5200	\$10,400	\$17,900	$17,900 / 12 =$ 1491	$(1,000,000 - 17,900) / 1491 =$ <b>658</b>	
Gold futures	8	20	\$1100	\$8800	\$26,700	$26,700 / 20 =$ 1,335	$(1,000,000 - 26,700) / 1335 =$ <b>729</b>	
Eurodollar futures	5	25	\$750	\$3750	\$30,450	$30,450 / 25 =$ 1218	$(1,000,000 - 30,450) / 1218 =$ <b>796</b>	100
Eurodollar Futures	112		\$750		ORDER REJECTED – Max Quantity Limit Exceeded			
e-Mini Dow \$5 futures	12	37	\$5200	\$62,400	\$92,850	$92,850 / 37 =$ 2509	$(1,000,000 - 92,850) / 2509 =$ <b>361</b>	
Gold futures	15	52	\$1100	\$16,500	\$109,350	$109,350 / 52 =$ 2102	$(1,000,000 - 109,350) / 2102 =$ <b>423</b>	
e-Mini Dow \$5 futures	<b>CANCEL</b> 5	47	\$5200	\$26,000	\$83,350	$83,350 / 47 =$ 1773	$(1,000,000 - 83,350) / 1773 =$ <b>517</b>	
Gold futures	74	121	\$1100	\$81,400	\$164,750	$164,750 / 121 =$ 1361	$(1,000,000 - 164,750) / 1361 =$ <b>613</b>	
e-Mini Dow \$5 futures	74	195	\$5200	\$384,800	\$549,550	$549,550 / 195 =$ 2817	$(1,000,000 - 549,550) / 2817 =$ <b>159</b>	
e-Mini Dow \$5 futures	74	269	\$5200	\$384,800	\$934,350	3473	$(1,000,000 - 934,350) / 3473 =$ <b>19</b>	
Eurodollar futures	25		\$750		ORDER REJECTED – Clip Limit Exceeded			

## Position Calculations

---

Current position totals are calculated as overall long and short positions for both futures and options per Executing Firm ID. The current position totals are defined as the margin rate multiplied by the number of contracts which is an aggregate of open orders and fills per product complex. Product complex values are then aggregated to the total overall position.

- Quotes (Mass Quotes) are not included in open position calculations, but fills resulting from quotes are included in the filled and total position.
- The following are included in the filled and total position, but not the open position.
  - User Defined Spreads (UDS) covered instruments
- Positions are maintained separately for each futures product complex and for each options product complex. Then futures product complex positions are aggregated and options product complex positions are aggregated.
- Positions are calculated continuously. Filled Positions are reset at the end of each trade day at 16:30 CST.

**Note:** Good 'til Cancel (GTC) and Good 'til Day (GTD) orders are included in the position calculation for the given Executing Firm ID / Exchange group at the beginning of the trading week.

- Submitted orders that trigger a violation at 100% of the limit will not be rejected as long as the order does not violate the dynamic clip size. Any subsequent orders will be rejected.

Click this link to learn more about [Spread Order Calculations](#).

## Spread Order Calculations

GC2 nets out the working exposure for both positions as long as both Buy/Sell sides exist for the spread, and applies a **Spread Adjustment Factor** to all working spread orders.

### Spread Adjustment Factor

The Spread Adjustment Factor is a single percentage value applied to all qualifying spreads and only applicable to working spread orders. The spread's working margin value is "unwound", or recalculated, if the spread order's open quantity matches partially. (See [Example 4](#) below). The Spread Adjustment Factor:

- is calculated to a maximum of two decimals places
- is always a positive value
- is configurable by designated Exchange personnel only
- if the Spread Adjustment Factor value is reconfigured, the new value is applied to incoming spread orders at the start of the next day's trading session

### Conditions for Spread Adjustment Factor Application

All of the following conditions must be valid before the Spread Adjustment Factor is applied:

1. The spread legs are in the same Product Complex. Current Product Complexes include Agriculture, Energy, Environmental, Equity Index, FX, Interest Rates, Metals, and Weather.
2. The spread legs are all within the same Product Type, which is either "all futures" or "all options".
  - The Spread Adjustment Factor is not applied to spread types that have both Futures and Options, for example Covered.
3. For futures spreads, the spread contains at least one buy leg and one sell leg.
4. For options spreads, the spread contains at least one buy leg and one sell leg and/or one call and one put.
5. All the spread legs are within the same Control Group. Control Group is the product/Legal Clearing Entity relationship defined by the Risk Administrator.
6. In conditions where a spread has some legs which qualify for the Spread Adjustment Factor and some leg(s) do not:
  - For the legs which do qualify, the Spread Adjustment Factor and the resulting working margin will be applied to the associated group, Executing Firm ID / Exchange.
  - For the leg(s) which do not qualify, GC2 applies the full margin rates to the associated group, Executing Firm ID / Exchange.

### Spread Adjustment Factor Application and Exception Examples

Intra-Commodity Future Spread	For a Eurodollar bundle, the Spread Adjustment Factor does not apply because all the future legs are on the same side.
Intra-Commodity Covered (single option leg and single future leg)	For 10-yr Note option call covered by the 10-yr Note future, the Spread Adjustment Factor does not apply because the spread crosses over futures and options Product Types.
Inter-Exchange Future Spread across Control Groups	For DME/NYMEX energy future calendar spread, the Spread Adjustment Factor does not apply if the Risk Admin defined the DME and NYMEX across two Control Groups. If the Risk Admin has grouped them in the same Control Group, then the Spread Adjustment Factor would apply.
Intra-Commodity Covered (two option legs and single future leg)	For Eurodollar Put Vertical covered with a Eurodollar future, the Put Vertical – by definition – includes two different option legs (same month but different strikes). In this

### Spread Adjustment Factor Application and Exception Examples

	<p>case, the entire spread will not qualify for the Spread Adjustment Factor because at least two of the legs cross over Product Types (i.e. the spread is not “all futures” or “all options”).</p>
Intra-Commodity Option Spread across Control Groups	<p>Assume a 10-leg generic UDS is created wherein 6 of the legs are CBOT option products (buy call and put options) and the other 4 legs are CME option products (sell put options). The Risk Admin has CBOT and CME products in separate Control Groups.</p> <p>The 6 CBOT option legs will have the Spread Adjustment Factor applied because the call and put options offset. The resulting working margin will be applied to the CBOT Control Group.</p> <p>The 4 CME option legs will not have the Spread Adjustment Factor applied because the put options do not offset. Each of the four options’ full margin rates will be applied to the CME’s Control Group’s working margin.</p>

**Note:** GC2 enforces Inter-Exchange Spreads (IES) at the leg-level. Breach of the exposure limit on one or more of the exchange groups, results in the rejection of the IES order.

### Working Order Spread Calculation

When a spread meets the criteria specified above, the following calculations are applied:

Calculate Value <b>A</b> = Spread’s total margin	<p>Value <b>A</b> is the sum of:</p> <ul style="list-style-type: none"> <li>the spread order quantity (+/- for buy/sell)</li> <li>multiplied by each leg’s buy/sell ratio (+/- for buy/sell)</li> <li>multiplied by each leg’s margin rate as seeded from the ref file</li> </ul>
Calculate Value <b>B</b> = Spread's total margin in absolute value terms	<p>Value <b>B</b> is the sum of:</p> <ul style="list-style-type: none"> <li>the spread order quantity</li> <li>multiplied by each leg’s buy/sell leg Ratio</li> <li>multiplied by each leg’s margin rate</li> </ul>
Calculate Value <b>C</b> = Value B multiplied by the Spread Adjustment Factor	
Determine the spread’s working long value	<ul style="list-style-type: none"> <li>If Value A is positive then the working long value is Value A + Value C</li> <li>If Value A is zero or negative then the working long value is Value C</li> </ul>
Determine the spread’s working short value	<ul style="list-style-type: none"> <li>If Value A is negative then the working short value is Value A - Value C</li> <li>If value A is zero or positive then the working short value is -1 multiplied by Value C</li> </ul>

### Working Summary

	Working Long	Working Short
If Value A is positive	Value A + Value C	-1 * Value C
If Value A is negative	Value C	Value A – Value C
If Value A is zero	Value C	-1 * Value C

## Spread Calculation Examples

### Example 1 - Inter-Commodity Futures Spread

BUY 1 CORN vs WHEAT Future Calendar Spread (+2:-1) Ratio

CORN Margin = \$1500, WHEAT Margin = \$2500

**Value A** = Corn (1 order qty \* 1500 margin \* 2 leg ratio) - Wheat (1 order qty \* 2500 margin \* -1 leg ratio)  
(3000 - 2500) <or> 500

**Value B** = abs (1 order qty \* 1500 margin \* 2 leg ratio) + abs (1 order qty \* 2500 margin \* -1 leg ratio)

**Value C** = (Value B \* Spread Adjustment Factor) <or> (5500 \* 0.10) <or> 550

Determine working long value

Since Value A is positive then working long for Corn is equal to (Value A + Value C) or (500 + 550) or 1050

Determine working short value

Since Value A is positive then working short for Wheat is equal to (-1 \* Value C) or (-1 \* 550) or -550

### Example 2 - Intra-Commodity Futures Spread

Sell 3 CORN Future vs CORN Futures Calendar Spread (1:-1) Ratio

CORN Margin \$2000

**Value A** = Corn (-3 \* 2000 \* 1) + Corn (-3 \* 2000 \* -1) = 0

**Value B** = abs (3 \* 2000 \* -1) + abs (3 \* 2000 \* 1) = 12000

**Value C** = Value B \* Spread Adjustment Factor <or> (12000 \* 0.10) = 1200

Determine working long value

Since Value A is zero then the working long value is Value C or \$1200

Determine working short value

Since Value A is zero then the working short value is (-1 \* Value C) or (-1 \* \$1200) or -1200

### Example 3 - Intra-Commodity Options Spread

Buy 100 eMini S&P Strangles (1put: 1call ratio)

Put Margin = -\$280; Call Margin = \$200

**Value A** = Put (100 \* -280 \* 1) + Call (100 \* 200 \* 1) = -8000



$$\text{Value B} = \text{abs}(100 * -280 * 1) + \text{abs}(100 * 200 * 1) = 48000$$

$$\text{Value C} = \text{Value B} * \text{Spread Adjustment Factor} <\text{or}> (48000 * 0.10) = 4800$$

Determine working long value

Since Value A is negative then the working long value is Value C or \$4800

Determine working short value

Since Value A is negative then working short value is (Value A - Value C) or (-8000 - 4800) or -12800

**Example 4 - Unwinding a Partially Matched Futures Spread**

1. Assume the margin results of Example 3:

-A buy order of 100 eMini S&P Strangles is resting on the book

-Working Long = 4800 and Working Short = -12800

**Buy 100 eMini S&P Strangles**

Total Long -----Total Short

4800 ----- -12800

2. An incoming 25-lot order matches. 25 strangles fill and 75 strangles remain.

$$\text{Value A} = \text{Put}(75 * -280 * 1) + \text{Call}(75 * 200 * 1) = -6000$$

$$\text{Value B} = \text{abs}(75 * -280 * 1) + \text{abs}(75 * 200 * 1) = 36000$$

$$\text{Value C} = \text{Value B} * \text{Spread Adjustment Factor} <\text{or}> (36000 * 0.10) = 3600$$

Determine working long value

Since Value A is negative then the working long value is Value C or \$3600

Determine working short value

Since Value A is negative then working short value is (Value A - Value C) or (-6000 - 3600) or -9600

Calculate Longs:

$$\text{-Call} = 25 \text{ qty} * 200 = 5000$$

Calculate Shorts:

$$\text{-Put} = 25 \text{ qty} * 280 = 7000$$

Total Long = Working Long + Longs - Shorts

$$\text{-Total Long} = 3600 + 5000 - 7000$$

$$\text{-Total Long} = \$1600$$

Total Short = Working Short + Shorts - Longs

$$\text{-Total Short} = 9600 + 7000 - 5000$$

$$\text{-Total Short} = 11600$$

**Buy 75 eMini S&P 500 Strangles**

Bought 25 Calls

Bought 25 Puts

Total Long ----- Total Short

1600 ----- -11600

## Terminology

Term	Provided By Risk Administrator	Definition
Buy Futures	Y	The Buy Futures area on the GC2 window that enables the GC2 Risk Administrator to set Max Quantity Limit for a futures "buy" order.
Buy Options	Y	The Buy Options area on the GC2 window that enables the GC2 Risk Administrator to set Max Quantity Limit for an options "buy" order.
Clip Size	Y	Maximum quantity per order.
CME Globex API ID	N	Also called <a href="#">Executing Firm ID</a> .
Clearing Firm	N	The CME Group or partner exchange Clearing member firm.
Clearing Firm Administrator	N	Individual at the Clearing firm who has the capability to enter and change risk parameters for GC2.
Control Group	N	Logical grouping of Executing Firm ID / Exchange within a <a href="#">Legal Clearing Entity (LCE)</a> .
Covered Spread	N	Buying and selling option(s) and future(s) to achieve delta neutrality (i.e. insulate the option leg(s) from price risk) .  <b>Example:</b> Buying 10 50-delta eMini S&P Dec call options and selling 5 eMini S&P Dec futures.
Credit Control Alerts	Y	GC2 displays exposure limit and clip size alerts.
Current Positions - Futures	N	The area on the GC2 window which details the long and short futures positions. The position is based on the margin rate and defined in U.S. dollars.
Current Positions - Options	N	The area on the GC2 window which details the long and short options positions. The position is based on the margin rate defined in U.S. dollars.
Dynamic Clip Size	N	The maximum order quantity which is dynamically calculated by the tool.
Exchange	N	An organization, incorporated or unincorporated, that constitutes, maintains, or provides a marketplace or facilities for bringing together purchasers and sellers of securities or futures.  <b>Examples:</b> CBOT, CME, NYMEX, COMEX and KCBT.
Exchange Defined Spread (EDS)	N	Spreads whose legs are defined by the Exchange. EDS is the only way by which future spreads are defined. There is no EDS for options.
Executing Firm ID	N	A logical entity allowed to trade products in accordance with its

Risk Management Tools

Term	Provided By Risk Administrator	Definition
		clearing relationships. The Executing Firm ID is three digits long and is alphanumeric or just numeric. Sometimes this coincides with the Clearing Firm ID. Executing Firm ID is synonymous with: Executing Firm, CME Globex API / <a href="#">CME Globex API ID</a> , Trading Member Firm (TMF) / Trading Firm, and Badge Firm.
Exposure Limit	Y	<p>The GC2 Risk Administrator <b>must</b> set the exposure limits per Executing Firm ID / Exchange for:</p> <ul style="list-style-type: none"> <li>• Futures overall exposure limit in USD (no default, a value must be set)</li> <li>• Options overall exposure limit in USD (no default, a value must be set)</li> </ul> <p>If a position reaches the exposure limit at 100%, CME Globex rejects all new orders and cancel/replace messages on the exceeding side. A cancel message is accepted.</p>
Inter-Exchange Spread	N	<p>Buying and selling the same future but on different Exchanges</p> <p><b>Example:</b> NYMEX July Wheat vs KCBT Oct Wheat</p>
Inter-Market Spread	N	<p>All legs are in a similar underlying asset. Buying one future in a given delivery month and selling a different future in the same delivery month.</p> <p><b>Example:</b> Crack Spread = Crude Oil vs. Unleaded Gasoline and Heating Oil</p> <p><b>Example:</b> Crush spread = Soybeans vs Soybean Oil and Soybean Meal</p>
Intra-Commodity Spread	N	<p>Buying and selling the same future but for different months Example: Buy July Wheat and sell Dec Wheat .</p>
Legal Clearing Entity (LCE)	N	<p>GC2 Entity is defined as the Clearing firm which legally guarantees trades executed for a single Executing Firm on CME Globex. The clearing firm may clear products from a single or multiple exchanges.</p> <p>GC2 Entity is defined as the combination of Legal Clearing Entity + <a href="#">Executing Firm ID</a> + <a href="#">Exchange</a></p>
Max Quantity Limits	Y	<p>In addition to entering the Exposure Limits, the risk administrator can enter the optional Max Quantity Limit Clip Size for Buy/Sell Futures and/or Buy/Sell Options for the grouping.</p>
Notifications	Y	<p>The Clearing Firm or partner exchange risk administrator can specify the percentage of utilized limit at which to receive a credit control alert.</p>
Product Complex	N	<p>Describes a group of products belonging to a given economic sector or market segment which include: Agriculture, Credit, Economic Events, Energy, Equity Index, FX, Interest Rates or</p>

Term	Provided By Risk Administrator	Definition
		Metals.
Reference Margin Rate	Y	A contract of reference is selected on GC2 to determine the initial reference margin rate using in calculating the dynamic clip size.
Risk Administrator	N	Defines the daily exposure limits per Executing Firm ID/ Exchange group using GC2.
Sell Futures	Y	The Sell Futures area on the CME Globex Credit Controls window where the GC2 Risk Administrator sets Max Quantity Limit for a futures "sell" order.
Sell Options	Y	The Sell Options area on the GC2 window where the GC2 Risk Administrator sets Max Quantity limit for an options "sell" order.
Spread Adjustment Factor	N	A positive single percentage value that is universally applied for all qualifying spreads.
User Defined Spread (UDS)	N	Spreads whose legs are defined by the client. UDS are the only way by which option spreads and Covereds can be created. There are no UDS for futures.
Weighted Margin Rate	N	This value is dynamically calculated by GC2 based on all the contracts the <a href="#">Executing Firm ID</a> / Exchange group is trading.

# Risk Management Interface (RMI)

The Risk Management Interface (RMI) allows authorized Clearing Firm risk administrators to manage market exposure of their respective execution firms, at the account level, by [Blocking](#) or [Unblocking](#) the entry of all new orders.

▶ **To view or manage blocks:**

1. [Login](#) to CME Group Risk Management Tools.
2. From the **RMI** tab, click **Block/Unblock**.
3. Select the **Legal Clearing Entity** and **Execution Firm** from the drop-down boxes. The **Active Blocks** tab populates.

The bottom of the **Active Blocks** tab displays the number of results and page navigation:

**CME Group Risk Management Tools**

CME Global Command Center  
North America : (+1) 312-456-2391  
Europe : +44-20-7623-4708  
Asia : +65-6223-1357

GC2 RMI DSF Access Manager Kill Switch Reports Logout

**RMI - Block/Unblock**

Legal Clearing Entity: XYZ GLOBAL  
Execution Firm: AN EXECUTION FIRM

Active Blocks Create Blocks

Filters 10/02/2013 11:16 AM cst Refresh

Account ID	Side	Derivative Type	Product	Product Description
ACCOUNT 1	Buy	Futures	0A	Mini European 1% Fuel Oil Barges FOB Rdam (Platts) BALMO Futures
ACCOUNT 1	Buy	Futures	0B	Mini European 1% Fuel Oil Cargoes FOB NWE (Platts) Futures
ACCOUNT 1	Buy	Futures	0C	Mini European 1% Fuel Oil Cargoes FOB NWE (Platts) BALMO Futures
ACCOUNT 1	Buy	Futures	0E	Mini European 3.5% Fuel Oil Barges FOB Rdam (Platts) BALMO Futures

1-4 of 4

Unblock Clear Selected unblocks selected: 0

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▶ **To manage active or pending blocks, proceed to one of the following topics:**

- [Unblock Accounts](#)
- [Block Accounts](#)
- [Manage Pending Blocks](#)

## Unblock Accounts

Trading member firms can resume trading only if the Clearing firm risk administrator unblocks the account through RMI.

▶ **To unblock actively blocked accounts:**

1. From the **RMI** tab, click **Block/Unblock**.
2. Select the **Legal Clearing Firm** and **Execution Firms** from the drop-down lists.
3. From the **Active Blocks** tab, select the check box for the Account(s) to Unblock. By default, all currently active blocks for all accounts belonging to the selected execution firm are populated in the list, regardless of which system or user applied the blocks. The total number of blocks and page navigation display at the bottom of this tab.

To narrow an account search, click **Filters**, select search criteria, then click **Apply**:

The screenshot shows a dialog box titled "Historical Instruction Filters" with the instruction "Ctrl + click to select/deselect multiple items". It features eight filter categories, each with a list box and a checkmark:

- Account:** List box contains "1".
- Action:** Empty list box.
- Side:** List box contains "Buy" and "Sell".
- Derivative Type:** List box contains "Futures".
- Exchange:** Empty list box.
- Product:** List box contains "All Products".
- User:** Empty list box.
- Source:** Empty list box.
- Response:** Empty list box.

At the bottom of the dialog are two buttons: "Apply" and "Cancel".

Note: To clear the check box selections and to refresh the screen view, click [Refresh](#) as needed.

3. Click **Unblock**.

**RMI - Block/Unblock**

Legal Clearing Entity: QA TEST1 LCE  
Execution Firm: 628 - RMI TEST FIRM 628

Active Blocks | Create Blocks

Filters current as of 07/16/2012 11:28 AM cst Refresh

	Account ID	Side	Derivative Type	Product	Product Description
<input checked="" type="checkbox"/>	1	Buy	Futures	All Products	
<input checked="" type="checkbox"/>	1	Sell	Futures	All Products	

1-2 of 2

4. A pop-up message confirms the unblock. Click **OK** to proceed.

5. A pop-up message indicates the unblock was successful. Click **OK**.

Unblocking an account removes the criteria from the Risk Management Interface. Active blocks will never appear on the Create Blocks tab, as they are independent of one another.


To block another account, refer to [Block Accounts](#).

## Block Accounts

The RMI Risk Administrator can set order entry blocks from a specific Execution Firm account, defined by Product Type (Options or Futures), Product, and Side (Buy or Sell) restrictions.

### ▶ To block an account:

1. From the **RMI** tab, click **Block/Unblock**.
2. Select the **Legal Clearing Firm** and **Execution Firms** from the drop-down lists.
3. From the **Create Blocks** tab, either add a new account name or select one from the Account List box.

To enter a new account, from the Account box, type an Account name, then click . The Account name copies to the **Account List** box, where it remains until RMI session logout.

3. From the **Account List** box, click the account name for which to set block criteria.
4. Filter the block criteria as needed by clicking any of the following drop-down boxes:
  - **Exchange**
  - **Derivative Type**- All Derivative Types, Futures, Options. Selecting a Derivative Type without selecting a Product blocks all Products for the selected type.
  - **Complex Type** - All Complex Types, Commodities, Energy, Equities, Interest Rate CBOT, Interest Rate CME
  - **Product** - Click a product to block. Select multiple products by pressing either **Ctrl + click**, or **Shift + click**.
  - **Side**- All Sides, Buy, Sell.

If you do not select any criteria, ALL is selected by default.

5. Click **Add**. The selection appears in the Pending Blocks section of the screen.


**RMI - Block/Unblock**

Legal Clearing Entity: QA TEST1 LCE

Execution Firm: 628 - RMI TEST FIRM 628

Active Blocks | Create Blocks

**Block Criteria**

Account:  

Account List: 


1
---

Filters:

- Exchange: All Exchanges
- Derivative Type: All Derivative Types
- Complex Type: Commodities

Product: 





12C - Corn Dec-Dec CSO
12S - Soybean Nov-Nov CSO
12W - Wheat July-July CSO
BSW - Black Sea Wheat Futures
CWZ - Wheat Dec-Dec CSO
CZ6 - Corn July-Dec CSO
CZ8 - Corn Dec-July CSO
CZC - Consecutive Corn CSO
CZL - Cash Soybean Oil Future



Side: All Sides

**Pending Blocks**

	Account ID	Side	Derivative Type	Product	Product Description
<input checked="" type="checkbox"/>	1	Buy	Futures	All Products	
<input type="checkbox"/>	1	Buy	Options	All Products	
<input checked="" type="checkbox"/>	1	Sell	Futures	All Products	
<input type="checkbox"/>	1	Sell	Options	All Products	



6. Select the check box next to the account to block, then click **Block**.
7. A pop-up message confirms the block. Click **OK** to proceed.
8. A pop-up message indicates the block was successful. Click **OK**.

When an account is Blocked, it appears in the list on the **Active Blocks** tab, where it can then be [Unblocked](#).

To make any changes to a selected pending block, proceed to [Manage Pending Block](#).

## Manage Pending Blocks

The Create Blocks tab of RMI lists all accounts that have not yet been blocked from activity.

**Block Criteria**

Account:  Copy to List

Account List: 1, 1234

Filters:

- Exchange: All Exchanges
- Derivative Type: All Derivative Types
- Complex Type: All Complex Types

Product: 12C - Corn Dec-Dec CSO, 12S - Soybean Nov-Nov CSO, 12W - Wheat July-July CSO, 7Y - 7-Year Interest Rate Swap Future, AW - Dow Jones UBS Excess Return, BOB - U.S. Treasury Bond vs. Ultra U., BOI - U.S. Treasury Bond vs. 30-Year, BSW - Black Sea Wheat Futures, BUS - Binary Options Spreads

Side: All Sides

**Pending Blocks**

	Account ID	Side	Derivative Type	Product	Product Description
<input type="checkbox"/>	1	Buy	Options	All Products	
<input type="checkbox"/>	1	Sell	Options	All Products	
<input checked="" type="checkbox"/>	1234	Buy	Options	12C	Corn Dec-Dec CSO
<input checked="" type="checkbox"/>	1234	Sell	Options	12C	Corn Dec-Dec CSO

After setting block criteria and adding the selected accounts to the Pending Blocks section, RMI Risk Administrators can use the following buttons to manage any of the accounts for which they have selected check boxes:

Button	Description
<input type="button" value="Clear Selected"/>	Clears all selected check boxes for accounts in the Pending Blocks section.
<input type="button" value="Remove Selected"/>	Removes accounts with selected check boxes from the Pending Blocks section.
<input type="button" value="Remove All"/>	Removes all accounts from the Pending Blocks section, even if check boxes are not selected.

For additional information, see how to [Block](#) or [Unblock](#) an account.

# Instruction History

The RMI Instruction History function allows the RMI Risk Administrator to view, filter, and export the last 10 days of blocked, unblocked and cancel activity within the Risk Management Interface (RMI).

▶ **To view Instruction History:**

1. From the **RMI** tab, click **Instruction History**.

**RMI - Instruction History**

Legal Clearing Entity:

Execution Firm:

**Historical Instructions**

current as of 07/17/2012 04:47 PM cst

From Date:  To Date:

Account ID	Action	Side	Derivative Type	Product	Product Description	Exchange	User ID	Source	Date/Time	Response
AA12345	Unblock	Buy	Options	All Products			gc2_test001	rmi_ui	07/17/2012 04:47 PM cst	A
AA12345	Block	Buy	Futures	All Products			gc2_test001	rmi_ui	07/17/2012 04:47 PM cst	A
AA12345	Block	Buy	Options	All Products			gc2_test001	rmi_ui	07/17/2012 04:47 PM cst	A
AA12345	Block	Sell	Futures	All Products			gc2_test001	rmi_ui	07/17/2012 04:47 PM cst	A
AA12345	Block	Sell	Options	All Products			gc2_test001	rmi_ui	07/17/2012 04:47 PM cst	A
ABC123	Cancel	n/a	n/a	n/a	n/a	DUMX	rmi_test01	rmi_api	07/17/2012 04:18 PM cst	A

**Note:** When the number of results exceeds 5000 rows, click the **Next** or **Previous** buttons to navigate the result pages.

2. Select the **Legal Clearing Firm** and **Execution Firms** from the drop-down lists.

Perform any of the following actions to filter or sort the activity information:

- To narrow an account search, click **Filters**, select search criteria, then click **Apply**:

**Historical Instruction Filters**

Ctrl + click to select/deselect multiple items

<b>Account</b> 00201 ▲ 12345 1C2d ABC123 AbCd1 ▼	<b>Action</b> Block Cancel Unblock	<b>Side</b> Buy Sell	<b>Derivative Type</b> Futures Options	<b>Exchange</b> XCBT XCME XMGE XNYM
<b>Product</b> 6A ▲ All Products B0A CL GE ▼	<b>User</b> rmi_test37	<b>Source</b> rmi_api	<b>Response</b> Accepted Partially Accepted Rejected	

- Click the **From Date** and **To Date** drop-down boxes to filter activity by specific dates within the last 10 days. After setting the date range, click **Reload** to update the search results.
- Click any column heading to sort the results.
- Click **Refresh** at any time to clear all sort/filter criteria and view most recent activity.

 **To export the activity information to Excel:**

1. Click the **Export to Excel** icon. The **File Download** window appears, prompting to Open or Save the file.
2. Save the file in a desired location or Open the file to view the output:

	A1	Account ID									
	A	B	C	D	E	F	G	H	I	J	
1	Account ID	Action	Side	Derivative Type	Product	Product Description	Requested By	Source	Date/Time	Response	
2	1234	Block	Buy	Options	CZ6	Corn July-Dec CSO	E11960	rmi_ui	07/16/2012 02:15 PM cst	Accepted	
3	1234	Block	Sell	Options	CZ6	Corn July-Dec CSO	E11960	rmi_ui	07/16/2012 02:15 PM cst	Accepted	
4	1	Unblock	Buy	Futures	All Products		E11960	rmi_ui	07/16/2012 02:00 PM cst	Accepted	
5	1	Unblock	Sell	Futures	All Products		E11960	rmi_ui	07/16/2012 02:00 PM cst	Accepted	
6	1	Unblock	Sell	Futures	All Products		E11960	rmi_ui	07/16/2012 02:00 PM cst	Accepted	
7											

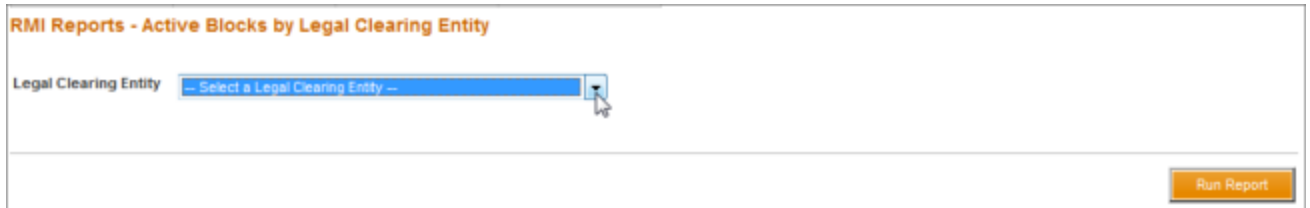
## RMI Reports

---

▶ **To run an RMI report:**

1. From the CME Group Risk Management Tools window, select **Reports>RMI>Active Blocks by Legal Clearing Entity**.

The following window displays:



RMI Reports - Active Blocks by Legal Clearing Entity

Legal Clearing Entity -- Select a Legal Clearing Entity --

Run Report

1. From the **Legal Clearing Entity** drop-down box, select a firm.
2. Click **Run Report**.
3. Depending on the browser being used, file either automatically downloads or a dialog box displays with open / save file options. If dialog box displays, take actions as appropriate.

# DSF Access Manager

Deliverable Swap Futures (DSF) contracts settle up with the delivery of the underlying swap from one clearing firm to another. Globex accounts at Clearing Firms are blocked by CME Group from entering new buy or sell orders for deliverable swap futures seven (7) calendar days before settlement of each contract. Use DSF Access Manager to positively permission accounts so these products may be traded during the blocked window.

## Note:

- Not all deliverable products can be accessed during the blocked trading window. Use DSF Access Manager to view products that are eligible for this feature.
- All current and future Globex Credit Controls (GC2) administrators are automatically permissioned for the DSF Access Manager. Both GC2 administrator rights and DSF Access Manager rights are granted simultaneously.
- DSF Access Manager only blocks new buy and sell orders from getting to the matching engine during the blackout window. DSF Access Manager does not keep a record of any open orders or start of day positions. All open positions and open working orders remain on the engine and in clearing until acted upon or expiration of the contract.

## Use DSF Access Manager to:

- [Permission Accounts](#)
- [View Active Permissions](#)
- [Revoke Active Permissions](#)

## Permission Accounts

Permission accounts by entering account and selecting applicable products.

**Note:** Selected account and product information remains populated for the current session only.

### To add permissions to an account:

1. From the **DSF Access Manager** tab, click **Grant/Revoke Permission**. **DSF Access Manager - Grant/Revoke Permission** page displays.
2. Select **Legal Clearing Entity** and **Execution Firm** from the respective lists.
3. Click the **Permission Account** tab. **Permission Account** sections display.

**DSF Access Manager - Grant/Revoke Permission**

Legal Clearing Entity

Execution Firm

Active Permissions | **Permission Account**

**Permission Criteria**

Account	Exchange	Product	Expiration Window*
<input type="text"/>	<input type="text" value="CBT"/>	B1U - 30 Year USD Deliverable Interest Rate Swap Futures : 10 days F1U - 5 Year USD Deliverable Interest Rate Swap Futures : 5 days N1U - 10 Year USD Deliverable Interest Rate Swap Futures : 7 days T1U - 2 Year USD Deliverable Interest Rate Swap Futures : 3 days	

\* in calendar days

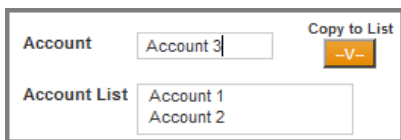
**Pending Permissions**

Account ID	Derivative Type	Product	Product Description	Expiration Window
No pending permissions created				

4. **Enter Account.**

- To retain account information between Legal Clearing Entity / Execution Firm selections or to permission multiple accounts at once, click **Copy to List**, and repeat for as many accounts as needed.

**Note:** Accounts added to the Account List persist across different LCE and Execution Firm combinations only through the duration of the DSF Access Manager’s current login. They are lost if browser is closed or DSF Access Manager logs off. Account list is unique to the DSF Access Manager’s instance and is not shared across login session at the same time.



5. Select an **Exchange**.

6. Select one or more products, either:

- Click one product to select that product.
- Click one product and then use Click/CTRL to select non-continuous products.
- Click one product and then use Click/Shift to select continuous products.

7. Select accounts (only needed for accounts have been moved to the account list), either:

- Click one account to select that account.
- Click one account and then use Click/CTRL to select non-continuous accounts.
- Click one account and then use Click/Shift to select continuous accounts.

8. Click **Add**. Selected account / product combinations display in the **Pending Permissions** section.

Pending Permissions					
	Account ID	Derivative Type	Product	Product Description	Expiration Window
<input type="checkbox"/>	Account 1	Futures	B1U	30 Year USD Deliverable Interest Rate Swap Futures	10
<input type="checkbox"/>	Account 1	Futures	N1U	10 Year USD Deliverable Interest Rate Swap Futures	7
<input type="checkbox"/>	Account 2	Futures	B1U	30 Year USD Deliverable Interest Rate Swap Futures	10
<input type="checkbox"/>	Account 2	Futures	N1U	10 Year USD Deliverable Interest Rate Swap Futures	7

1-4 of 4

permissions selected: 0

**Note:** It may be necessary to scroll down to see options at the bottom of the page.

9. Do one of the following:

- Click **boxes adjacent to Account ID**, and then click **Grant** to grant permissions for selected accounts to corresponding products. Click **OK** on confirmation page.
- Click **Select All** and then click **Grant** to grant permission for all accounts to corresponding products. Click **OK** on confirmation page.
- Click **Clear Selected** to clear checked boxes.
- Click **Remove Selected** to remove checked boxes from list.
- Click **Remove All** to clear list.

**Note:** Once **Grant** has been clicked, selected accounts have access to trade immediately.

## View Active Permissions

### ▶ To view active permissions:

1. From the **DSF Access Manager** tab, click **Grant/Revoke Permission**. **DSF Access Manager - Grant/Revoke Permission** page displays.
2. Select **Legal Clearing Entity** and **Execution Firm** from the respective lists.

Active permissions display in the **Active Permissions** tab.

Active Permissions		Permission Account		current as of 09/06/2013 11:40 AM cst			
<input type="button" value="Filters"/>							<input type="button" value="Refresh"/>
	Account ID	Derivative Type	Product	Product Description	Expiration Window		
<input type="checkbox"/>	ACCOUNT 1	Futures	B1U	30 Year USD Deliverable Interest Rate Swap Futures	10		
<input type="checkbox"/>	ACCOUNT 1	Futures	N1U	10 Year USD Deliverable Interest Rate Swap Futures	7		
<input type="checkbox"/>	ACCOUNT 2	Futures	B1U	30 Year USD Deliverable Interest Rate Swap Futures	10		
<input type="checkbox"/>	ACCOUNT 2	Futures	N1U	10 Year USD Deliverable Interest Rate Swap Futures	7		

3. (Optional) To filter by criteria, click **Filters**, select appropriate criteria, and click **Apply**. Filtered rows are removed from list and a message displays indicating filters are applied.
  - To cancel active filters, click **Filters**, click **Cancel** and then click **Refresh**. All active permissions display.

## Revoke Active Permissions

### ▶ To revoke active permissions:

1. From the **DSF Access Manager** tab, click **Grant/Revoke Permission**. **DSF Access Manager - Grant/Revoke Permission** page displays.
2. Select **Legal Clearing Entity** and **Execution Firm** from the respective lists.

Active permissions display in the **Active Permissions** tab.

Active Permissions		Permission Account		current as of 09/06/2013 01:19 PM cst			
<input type="button" value="Filters"/>							<input type="button" value="Refresh"/>
	Account ID	Derivative Type	Product	Product Description	Expiration Window		
<input type="checkbox"/>	ACCOUNT 1	Futures	B1U	30 Year USD Deliverable Interest Rate Swap Futures	10		
<input checked="" type="checkbox"/>	ACCOUNT 1	Futures	N1U	10 Year USD Deliverable Interest Rate Swap Futures	7		
<input type="checkbox"/>	ACCOUNT 2	Futures	B1U	30 Year USD Deliverable Interest Rate Swap Futures	10		
<input type="checkbox"/>	ACCOUNT 2	Futures	N1U	10 Year USD Deliverable Interest Rate Swap Futures	7		

1-4 of 4

<input type="button" value="Revoke"/>	<input type="button" value="Select All"/>	<input type="button" value="Clear Selected"/>	unblocks selected: 1
---------------------------------------	---	---	----------------------

**Note:** It may be necessary to scroll down to see options at the bottom of the page.



3. Do one of the following:
  - Click boxes adjacent to the accounts and corresponding products for which permissions are to be revoked.
  - Click **Select All** at the bottom of the page.
4. Click **Revoke**. Confirmation message appears.
5. Click **OK**. Selected accounts are removed from the **Active Permissions** list.

**Note:** Once **Revoke** has been clicked, selected accounts will not have access to trade immediately.

**Note:** If incorrect rows have been selected, click **Cancel** and **Clear Selected** at the bottom of the page.

## Account Rules

---

Note the following when creating accounts:

- Permission is only granted to the account exactly as it is entered.
- These special characters are not permitted: \$ # % & ! \* +

Same Account	Different Accounts
ABC1	ABBC1
#ABC1	ABC
\$ABC	(ABC1
%ABC1	(-ABC1
&ABC1	1ABC
!ABC1	@ABC1
*ABC1	^ABC1
+ABC1	ACB1
abc1	ABC11

# Kill Switch

Kill Switch provides a Globex Orders Kill function for the following levels: [Legal Clearing Entity, Execution Firm and Sender Comp.](#)

Use Kill Switch to shut down trading and influence conditions such as:

- Extreme trading events
- Market disruption
- Market fairness
- Systemic risks that runaway algorithms could pose

See [Enforcing Kill Switch](#) for more detailed information.

## Primary Features

Kill Switch functionality includes:

- Day Orders and Good Till messages are blocked when Kill Switch is invoked, however, Kill Switch will not cancel resting Good Till or Day Orders when a market is “closed” or in the final “30 seconds” prior to an open.
- Impacted customers are prevented from submitting any message other than what is required to keep alive the connection with the exchange (session management).
- Only orders intended for CME core match engines are supported.
- Customers receive a [reject message](#) with entity level and administrator role information.
- Blocking takes less than one second, though the cascading cancellations may extend beyond this time frame.

See [Message Impact](#) for more detailed information.

## Access Kill Switch

Kill Switch may be activated by the following administrator roles:

- Legal Clearing Entity Admin
- Execution Firm Admin
- CME Admin

See [Administrators](#) on the Enforcing Kill Switch page for more detailed information on Administrator roles and permissions.

Access Kill Switch using:

- [Execution Firm](#)
- [Legal Clearing Entity](#)

## Enforcing Kill Switch

CME Kill Switch tool enables Legal Clearing Entity (LCE) risk administrators and Execution Firm risk administrators to immediately block all new order entry and cancel all working orders.

The kill switch has three levels of kills that are enforced independently.

- Sender Comp is the most granular level. The SenderCompID (FIX Tag 49) is made up of Session ID (first three characters), Firm ID (second three characters), and Fault Tolerance (last character).
- Execution Firm (EF) is the next highest level and contains one or more Sender Comps assigned to an execution firm.
- Legal Clearing Entity (LCE) is the highest level and contains one or more EFs which in turn contain one or more Sender Comps.

Legal Clearing Entity 1						
Execution Firm 1			Execution Firm 2			
EF1 - SenderComp1	EF1 - SenderComp2	EF1 - SenderComp3	EF2 - SenderComp1	EF2 - SenderComp2	EF2 - SenderComp3	EF2 - SenderComp4

These levels act as a hierarchy where higher level kills will affect all levels below. Examples from the table above:

- If **EF1 - SenderComp1** is killed, all new order entry is prevented and all working orders are canceled for EF1 - SenderComp1.
- If **Execution Firm 1** is killed, all new order entry is prevented and all working orders are canceled for EF1-SenderComp1 through EF1-SenderComp3.
- If **Legal Clearing Entity 1** is killed, all new order entry is prevented and all working orders are canceled for all Execution Firms and Sender Comps that are cleared by Legal Clearing Entity 1.

## Administrators

The kill switch has three levels of risk administrators that can send kill/unkill instructions.

- Execution Firm risk administrators can be granted access to Kill Switch by their LCEs.
  - Once permissioned, EF risk admins can send kill/unkill instructions for all Sender Comps under their Executing firms. Kill/unkill instructions impact only exchanges to which the execution firm has access.
  - Multiple EF risk administrators can be permissioned for the same Execution Firm, in which case a kill applied by one administrator can be removed by another.
  - EF risk administrators can view kills that are put on by LCE administrators or CME administrators but do not have permission to change these kills/unkill instructions.
- Legal Clearing Entity (LCE) GC2 risk administrators are automatically granted access to Kill Switch. They have permissions to kill/unkill the LCE, all Execution Firms that the LCE clears, and all Sender Comps that the LCE clears.
  - An LCE risk administrator is only able to kill/unkill activity at these levels for exchanges that the LCE clears.
  - If an Execution Firm clears CME at LCE 1 but clears CBT at LCE 2, a kill instruction sent by the risk admin at LCE 1 would only affect trading for CME.
  - LCE administrators are able to view kill/unkill status placed by EF administrators and CME administrators but not change that status.
- CME administrators have the ability to act as both EF administrators and LCE administrators.
  - When impersonating risk admins, CME risk administrators have identical rights as the role they are impersonating.
  - CME risk administrators have the ability to view kill/unkill status placed by EF risk administrators and LCE risk administrators but not change that status.

## Administrator Permissioning

Administrator	May Clear:	Permissioned to:
Legal Clearing Entity (LCE) Admin	<ul style="list-style-type: none"> <li>• Legal Clearing Entity</li> <li>• Execution Firm</li> <li>• Sender Comp</li> </ul>	<ul style="list-style-type: none"> <li>• Kill their own LCE for permissioned exchanges across all EFs and Sender Comps.</li> <li>• Kill Execution Firms and Sender Comps orders that have been Guaranteed by that LCE.</li> </ul>
Execution Firm Admin	<ul style="list-style-type: none"> <li>• Execution Firm</li> <li>• Sender Comp</li> </ul>	Kill Execution Firms and Sender Comps under their Executing firms.
CME Admin	<ul style="list-style-type: none"> <li>• Legal Clearing Entity</li> <li>• Execution Firm</li> <li>• Sender Comp</li> </ul>	<ul style="list-style-type: none"> <li>• Kill any Legal Clearing Entity, Execution Firm and or Sender Comp.</li> <li>• Kill all guaranteed exchanges for EFs and Sender Comps.</li> <li>• Use the Kill functions on behalf of any other Initiator (can impersonate a CM or EF risk admin).</li> </ul>

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## Additional Rules

- Kill states at different levels by different roles are independent of each other.
- Multiple kills can be in place at the same time, however, an administrator cannot kill more than one entity at the same level at the same time. For example, if three Sender Comps are to be killed, each requires a separate kill instruction.
  - An EF can put a kill on a single Sender Comp, multiple Sender Comps, or the entire EF.
  - An LCE can place kills on specific Sender Comps, the entire EF, or the entire LCE.
- If there are multiple kills on a Sender Comp, they will have to be removed at each level before that Sender Comp is completely unkilld.
- A kill instruction placed at the Sender Comp level will remain in place until it is unkilld at the Sender Comp level; regardless of whether kill/unkill instructions have been placed at other levels.
- A kill instruction placed at the EF level will remain in place until it is unkilld at the EF level; regardless of whether kill/unkill instructions have been placed at other levels.
- A kill instruction placed at the LCE level will remain in place until it is unkilld at the LCE level; regardless of whether kill/unkill instructions have been placed at other levels.

## Message Impact

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### Blocked Messages

The following message types are blocked when a kill is being enforced:

- New Order
- Cancel Replace
- New Order Cross
- Cancel
- Order Status
- Quote Request
- Security Definition Request (to create a UDS – determine exchange ID based on first leg since although there could be multiple groups there are no inter-exchange UDS)
- Mass Quote (determine exchange ID based on first leg since there is only one exchange ID per instrument group)
- Quote Cancel (applies only to cancel quotes for a specific instrument & instrument group)
- Mass Cancel (applies only to cancel orders for a specific instrument & instrument group)

If a message is blocked due to kill switch, an [order reject message](#) will be generated for the customer.

### Non-Blocked Messages

These messages will not be blocked since they could potentially encompass an exchange which is not supposed to be blocked:

- Quote Cancel (cancel all quotes)
  - This message covers the entire options market. It is not possible to block this message based on a Kill Switch invocation of any one exchange or group of exchanges since the market maker could have working quotes belonging to exchanges which do not come under the domain of that particular Kill Switch command.
- Mass Cancel (cancel all orders for a market segment ID [match engine])
  - Market segments potentially envelope multiple exchanges. It is therefore not possible to block the Mass Cancel message based on a Kill Switch invocation for one exchange or group of exchanges, as a segment could be hosting other exchanges which do not fall within the domain of that particular Kill Switch command.

Administrative messages which the trading entity uses to maintain its connection to Globex are allowed (for example, heartbeat, sequence reset, resend).

## iLink Kill Switch Messages

iLink messages that may be used when Kill Switch is invoked.

Message	Example
Order reject because of Execution Firm level block placed by CME	8=FIX.4.29=15535=334=739369=83652=20131009-22:16:11.30549=CME50=G56=U17985N57=DUMMY143=US,IL45=83658= <b>Kill Switch enforced by CME for Executing Firm 9851028=Y10=202</b>
Order reject because of Sender Comp level block placed by Execution Firm Admin	8=FIX.4.29=15535=334=739369=83652=20131009-22:16:11.30549=CME50=G56=U17985N57=DUMMY143=US,IL45=83658= <b>Kill Switch enforced by EF for Sender Comp ID U179851028=Y10=202</b>
Order reject because of LCE level block placed by LCE Admin	8=FIX.4.29=15735=334=3498369=276752=20131010-01:41:19.67549=CME50=G56=ZU8650N57=DUMMY143=US,IL45=276758= <b>Kill Switch enforced by LCE for Executing Firm 6501028=N10=022</b>
Order Cancel ack	8=FIX.4.29=30935=834=734369=83252=20131009-22:14:45.10949=CME50=G56=U17985N57=0J070143=US,IL1=123456=011=verylongorderID1314=017=82305:137870520=037=8210361888638=1 <b>39=440=241=044=962048=80704754=155=GE59=060=20131009-22:14:45.107107=GEZ8150=4151=0167=FUT</b> <b>378=106432=201310101028=Y9717=ERIC110=079</b>

**Note:** For Order Cancel ack the cancel type indicator(tag 378) is same as RMI(106).



# Execution Firm

View Dashboard or [Execution Firm Kill/Unkill](#) page as an Execution Firm Administrator.

## Dashboard

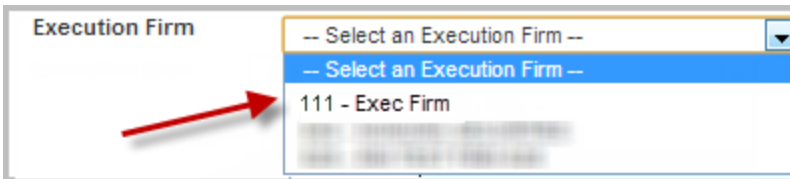
▶ To access Execution Firm Dashboard:

1. From the **Kill Switch** tab, select **Firm Dashboard**.



**Kill Switch - Execution Firm Dashboard** displays.

2. Select an **Execution Firm**.



Kills for selected Execution Firm display.

Execution Firm Kills			
EF Level	Sender Comp Level		
0 of 1	4 of 13		

LCE Kills			
LCE Name	LCE Level	EF Level	Sender Comp Level
A Legal Clearing Entity	0 of 1	0 of 1	0 of 13

CME Group Kills		
LCE Level	EF Level	Sender Comp Level
0 of 1	1 of 1	1 of 13

## Execution Firm Kill / Unkill

Use this page to Kill or Unkill Legal Exchanges at the Execution Firm and Sender Comp levels.

▶ To utilize Execution Firm Kill/Unkill page:

1. From the **Kill Switch** tab, select **Firm Kill/Unkill**.



**Kill Switch - Execution Firm Kill/Unkill** page displays.

2. Select an **Execution Firm** from the list. Selected **Execution Firm** and associated **Sender Comps** display.

**Note:** The Sender Comps that display will depend on [Administrator role](#).

Kill Switch - Execution Firm Kill/Unkill						
Execution Firm <input type="text" value="111 - Exec Firm"/>						
	Execution Firm	Sender Comp	Exchanges	Kill/Unkill	Killed by LCE	Killed by CME Group
EF →	111 - Exec Firm		CBT,CME,NYMEX	<input type="button" value="Kill"/>	No	No
Sender Comps →		ZUB650	CBT,CME,NYMEX	<input type="button" value="Kill"/>	No	No
		ZU8650	CBT,CME,NYMEX	<input type="button" value="Kill"/>	No	No
		YW7650	CBT,CME,NYMEX	<input type="button" value="Kill"/>	No	No

3. Do one or more of the following:
  - Click **Kill** or **Unkill** for **Execution Firm**, and click the confirmation message.
  - Click **Kill** or **Unkill** for one or more **Sender Comps**, and click the respective confirmation messages.

**Note:** A kill can be made at the Execution Firm level by one administrator with the appropriate permissions, and one or more Sender Comps can be killed by a different administrator with the appropriate permissions. Kills at all levels must be cleared before the Execution Firm or Sender Comp can trade again.

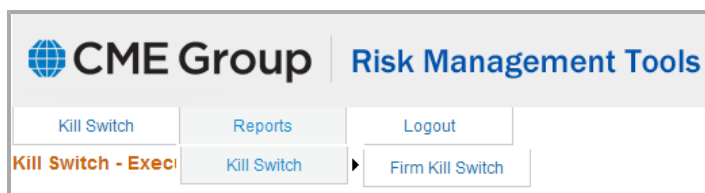
## Kill Switch Execution Firm Reports

Kill switch reports show all firms killed for an Execution Firm.

**Note:** If an execution firm has been selected previously in the Dashboard or Firm Kill/Unkill page, the report will automatically populate with kills for that execution firm.

▶ To run a Kill Switch report for an execution firm:

1. From the CME Group Risk Management Tools window, select **Reports>Kill Switch> Firm Kill Switch**,



The **Kill Switch - Execution Firm Report** page displays.


2. Select a firm from the **Execution Firm** drop-down box. Report populates.

**Kill Switch - Execution Firm Report**

Execution Firm:

Active Blocks Only

Sender Comp	Kill/Unkill	Level	Role	Initiator	Actor	Effective Date
ZU4628	Kill	SC	EF	ks_efadmin1 admin	Self	10/14/2013 09:53:12
NA	Kill	EF	EF	ks_efadmin1 admin	Self	10/14/2013 09:53:10

- To view active blocks only, click **Active Blocks Only**.
- To export to an Excel spreadsheet, click the  icon.

## Legal Clearing Entity

View Dashboard or [Legal Clearing Entity Kill/Unkill](#) page as a Legal Clearing Entity Administrator.

### Dashboard

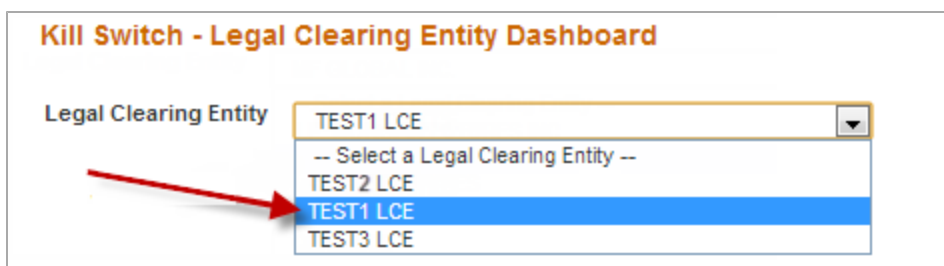
▶ To access Legal Clearing Entity Dashboard:

1. From the **Kill Switch** tab, select **LCE Dashboard**.



**Kill Switch - Legal Clearing Entity Dashboard** displays.

2. Select a **Legal Clearing Entity**.



Kills for selected LCE display.

A screenshot of the 'Kill Switch - Legal Clearing Entity Dashboard' page showing the kills for the selected LCE. The 'Legal Clearing Entity' dropdown is set to 'TEST1 LCE'. In the top right corner, there is a red button labeled 'Kill LCE'. Below the dropdown, there are three tables showing kills for different entities:

Execution Firm Kills		
EF Level	Sender Comp Level	
0 of 2	0 of 14	

Legal Clearing Entity (LCE) Kills		
LCE Level	EF Level	Sender Comp Level
0 of 1	0 of 2	0 of 14

CME Group Kills		
LCE Level	EF Level	Sender Comp Level
0 of 1	0 of 2	0 of 14

**Note:** To Kill the LCE and all underlying Execution Firms and Sender Comps from this page, click the red **Kill LCE** in the upper right of the page, and click **OK** on the confirmation pop-up.

## Legal Clearing Entity Kill / Unkill

Use this page to Kill or Unkill Legal Exchanges at the Legal Clearing Entity (LCE), Execution Firm, and Sender Comp levels.

▶ **To utilize the Legal Clearing Entity Kill/Unkill page:**

1. From the **Kill Switch** tab, select **LCE Kill/Unkill**.



**Kill Switch - Legal Clearing Entity Kill/Unkill** page displays.

2. Select a **Legal Clearing Entity** from the list. **Legal Clear Entity**, **Execution Firms** and **Sender Comps** display for the selected LCE.

**Note:** The Execution Firms and Sender Comps that display will depend on [Administrator Role](#).

3. Select an Execution Firm from the list (Optional). View is restricted by to selected **Execution Firm**.

**Kill Switch - Legal Clearing Entity Kill/Unkill**

Legal Clearing Entity: TEST1 LCE  
 Execution Firm: 628 - RMI TEST FIRM 628

	Legal Clearing Entity	Execution Firm	Sender Comp	Exchanges	Kill/Unkill	Killed by Execution Firm	Killed by CME Group
LCE	TEST1 LCE				<b>Kill</b>	NA	No
EF		628 - RMI TEST FIRM 628		KCB,MGE	<b>Kill</b>	No	No
Sender Comps			BVU0Z7	KCB,MGE	<b>Kill</b>	No	No
			PSB0Z7	KCB,MGE	<b>Kill</b>	No	No
			XHZ0Z7	KCB,MGE	<b>Kill</b>	No	No

4. Do one or more of the following:
  - Click **Kill** or **Unkill** for the **Legal Clearing Entity**, and click the confirmation message.
  - Click **Kill** or **Unkill** for one or more **Execution Firms**, and click the respective confirmation messages.
  - Click **Kill** or **Unkill** for one or more **Sender Comps**, and click the respective confirmation messages.

## Kill Switch Legal Clearing Entity Reports

Kill switch reports show all firms killed for a Legal Clearing Entity (LCE).

**Note:** If an LCE has been selected previously in any section of Risk Management Tools, the report will automatically populate with kills for that LCE.

▶ **To run a Kill Switch report for an execution firm:**

1. From the CME Group Risk Management Tools window, select **Reports>Kill Switch> Firm Kill Switch**,

CME Group Risk Management Tools

GC2 DSF Access Manager Kill Switch Reports Logout

GC2 - Manage Limits

GC2 Kill Switch LCE Kill Switch

The **Kill Switch - Legal Clearing Entity** page displays.


- Select a firm from the **Legal Clearing Entity** drop-down box. Report populates.

**Kill Switch - Legal Clearing Entity Report**

Legal Clearing Entity QA TEST1 LCE

Active Blocks Only

Execution Firm	Sender Comp	Kill/Unkill	Level	Role	Initiator	Actor	Effective Date
RMI TEST FIRM 628	YW7628	Kill	SC	LCE	Ice admin001	Self	10/14/2013 10:29:22 AM
RMI TEST FIRM 628	YWB628	Kill	SC	LCE	Ice admin001	Self	10/14/2013 10:29:19 AM
RMI TEST FIRM 818	NA	Kill	EF	LCE	Ice admin001	Self	10/14/2013 10:29:16 AM
RMI TEST FIRM 628	NA	Kill	EF	LCE	Ice admin001	Self	10/14/2013 10:29:13 AM

- To view active blocks only, click **Active Blocks Only**.
- To export to an Excel spreadsheet, click the  icon.