

# Messaging Controls

This topic provides information about CME Globex messaging controls. Extraordinary and excessive messaging rates generated by a client system can negatively impact all market participants (for example, by creating performance latencies). The CME Globex messaging controls are designed to address this risk by:

- supporting valid trading activity, and
- preventing a malfunctioning trading system from impacting the markets

To protect all market participants from the negative effects of excessive messaging, CME Group has implemented the messaging controls for iLink Order Entry as described below.

- [iLink Application Messaging Thresholds](#)
  - [Mass Quote Messaging Thresholds](#)
- [Administrative Messaging Thresholds](#)
  - [iLink](#)
  - [Drop Copy](#)

## iLink Application Messaging Thresholds

Messages submitted by the client system on an iLink session are monitored by the number of messages sent over a predefined time interval. The time interval begins with the first message processed. At the end of the interval, if no violation has occurred, the message count and interval reset pending the next message processed.

If an iLink session exceeds one or more of the thresholds, subsequent messages are rejected via a Session Level Reject (tag 35-MessageType=3) message until the messages per second (MPS) rate falls below the threshold. Exceeding a larger predefined threshold will result in a logout of the offending iLink session.



For MSGW sessions, the messaging thresholds are measured over the 3 second window for each MSGW session per market segment.

The thresholds are in place for the following Application message types:



Mass Quote and Quote Cancel are not subject to these application messaging thresholds.

### Application Messages

- New Order (tag 35-MessageType=D)
- Order Cancel/Replace (tag 35-MessageType=G)
- Order Status Request (tag 35-MessageType=H)
- Quote Request (tag 35-MessageType=R)
- New Order Cross (tag 35-MessageType=s)
- Security Definition Request (tag 35-MessageType=c)
- Cancel Request (tag 35-MessageType=F)
- Order Mass Action Request (tag 35-MessageType=CA)
- Application messages that fail business validation



Messaging Controls are offered in the New Release environment to allow customers to test their applications with the different messaging thresholds from production. For additional information regarding New Release messaging thresholds, contact [Certification Support for Electronic Trading \(CSET\)](#).

If a pre-defined logout threshold is exceeded, all resting orders are cancelled for all Cancel on Disconnect-registered iLink sessions.

The thresholds for each message are:

All times			
Message	Reject Threshold	Logout Threshold	Interval
Cancel Request (tag 35-MessageType=F)	1000	1500	Three-second window.
Order Mass Action Request (tag 35-MessageType=CA)			
All other application messages	500	750	Three-second window.

with the following exception:

Message	Reject Threshold	Logout Threshold	Interval
New Order (tag 35-MessageType=D)	100	150	Three-second window.
Order Cancel/Replace (tag 35-MessageType=G)			
Order Status Request (tag 35-MessageType=H)			
Quote Request (tag 35-MessageType=R)			
New Order Cross (tag 35-MessageType=s)			
Security Definition Request (tag 35-MessageType=c)			



The number of active or queued Order Status Requests (OSR) per iLink session is limited to 50. [Order Status Requests](#) (OSRs) that exceed the allowed number of active and queued requests will be rejected with a [Session Level Reject \(tag 35=3\)](#) with tag 58=**Exceeded maximum number of unacknowledged OSR requests**. New OSRs may be submitted as each OSR is fulfilled.

CME Group recommends that customers wait for each OSR to be fulfilled before submitting a new request.

## Mass Quote Messaging Thresholds

All mass quote messaging is measured in messages per second (MPS) over a three-second window. If an iLink session exceeds the mass quote threshold, subsequent mass quote messages will be rejected via a Session Level Reject (tag 35-MessageType=3) message until the mass quote MPS rate falls below the threshold. On a best-efforts basis, CME Group will cancel all resting quotes when an iLink sessions exceeds the Mass Quote reject threshold.

Mass Quote Messages:

- Mass Quote (tag 35-MessageType=i)
- Quote Cancel (tag 35-MessageType=Z)

Message	Reject Threshold	Logout Threshold	Interval
Mass Quote and Quote Cancel Messages	350	750	Three-second window.

## Administrative Messaging Thresholds

iLink and Drop Copy administrative messages are subject to thresholds.

The thresholds are in place for the following Administration message types:

### Administrative Messages

- Logon (tag 35=A)
- Heartbeat (tag 35=0)
- Test Request (tag 35=1)
- Resend Request (tag 35=2)
- Session Level Reject (tag 35=3)
- Business Level Reject (tag 35=j)
- Sequence Reset (tag 35=4)
- Logout (tag 35=5)
- Unknown message types
- Malformed Administrative and Application messages
- Administrative and Application Messages with invalid sequence numbers
- Administrative messages that fail session validation

Detailed information on CME Globex Port Closure Policy is available: <http://www.cmegroup.com/globex/trading-cme-group-products/gcc-support.html>.

### iLink

If an iLink session exceeds an average of 100 administrative messages per second (MPS) over a three-second window, subsequent administrative messages will be rejected via a Session Level Reject (tag 35-MessageType=3) message until the administrative MPS rate falls below the threshold.

CME Group will automatically close the ports for any iLink session that:

- exceeds 200 administrative messages per second over a three-second window, or
- exceeds 5 invalid Logon (tag 35=A) messages in 60 seconds, or
- sends any message other than a Logon before the session has successfully logged in.

## Drop Copy

For Drop Copy, CME Group will automatically close the ports for any Drop Copy session that:

- exceeds 5 invalid Logon (tag 35=A) messages in 60 seconds, or
- sends any message other than a Logon before the session has successfully logged in.

Additionally, Drop Copy sessions are subject to the following administrative messaging thresholds:

Messaging Controls for Drop Copy Sessions			
Environment	Reject Threshold	Port Closure/Logout Threshold	Interval
New Release	401	501	Three-second window
Production	100	200	Three-second window