



CME Globex Platform Disaster Recovery

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1. Introduction

This document describes the processes required to connect to CME Globex, CME Group Front-End Applications, CME Group Support Tools, Disaster Recovery (DR) Testing program, and other supplemental information if a DR event occurs. This document is intended for CME Group customers and system providers.

1.1 *Disaster Recovery Event Notification*

CME Globex Control Center (GCC) has implemented procedures to enhance information sharing with customers and staff in emergency situations. If the CME Group determines that a DR event has occurred, the GCC provides DR event notification to:

- Registered Contacts
- Non-Registered Contacts Enrolled in GCC Notifications.

Note: GCC posts a message about the event on the <http://www.cmegroup.com> web site.

Registered Contacts

To become a registered contact, you must complete Schedule 3&4, and be approved by the clearing firm administration. This service allows you to contact the GCC directly for order status and cancellation support. Registered contacts may contact the CME Globex Control Center at 312-456-2391, in Europe at 44-20-7623-4708, or in Asia at 65-6223-1357.

GCC Targeted Messaging

Registered contacts with the GCC are automatically subscribed to GCC targeted messaging. Non registered contacts can enroll by sending their name, email address and firm to gcc@cmegroup.com. Messages are sent via email, SMS text, cell and land line phones and updates are posted to the CMEG website for Globex market halts.

1.2 *Recovery Time Frames*

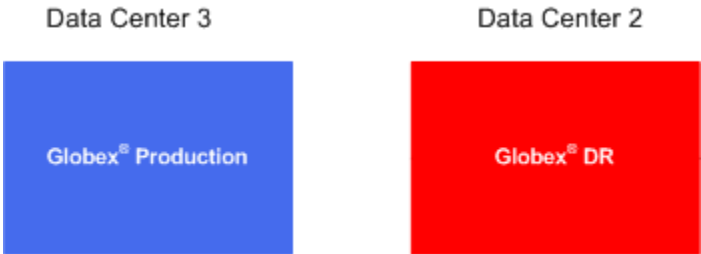
CME Group attempts to resolve a CME Globex disaster recovery event within a four-hour time frame. Once CME Group determines that the Market is ready to open, customers will be provided a 45 minute order staging period prior to the open.

2. CME Globex DR Process

A CME Globex DR event is defined when the CME Group switches client systems processing from the CME Globex Production environment to the CME Globex DR environment. This environment provides a redundant standby system upon the failure or abnormal termination of the CME Globex Production environment.

Note: CME Group customer certification environments (Certification and New Release) will not be available if a DR event occurs.

The following figure displays the data centers that support CME Globex Production and the Disaster Recovery environments.



If a disaster event occurs, CME Group has divided a timeline of the process into four states. Using these states, CME Group describes information about the products and services, capabilities and limitations that will occur for a disaster event.



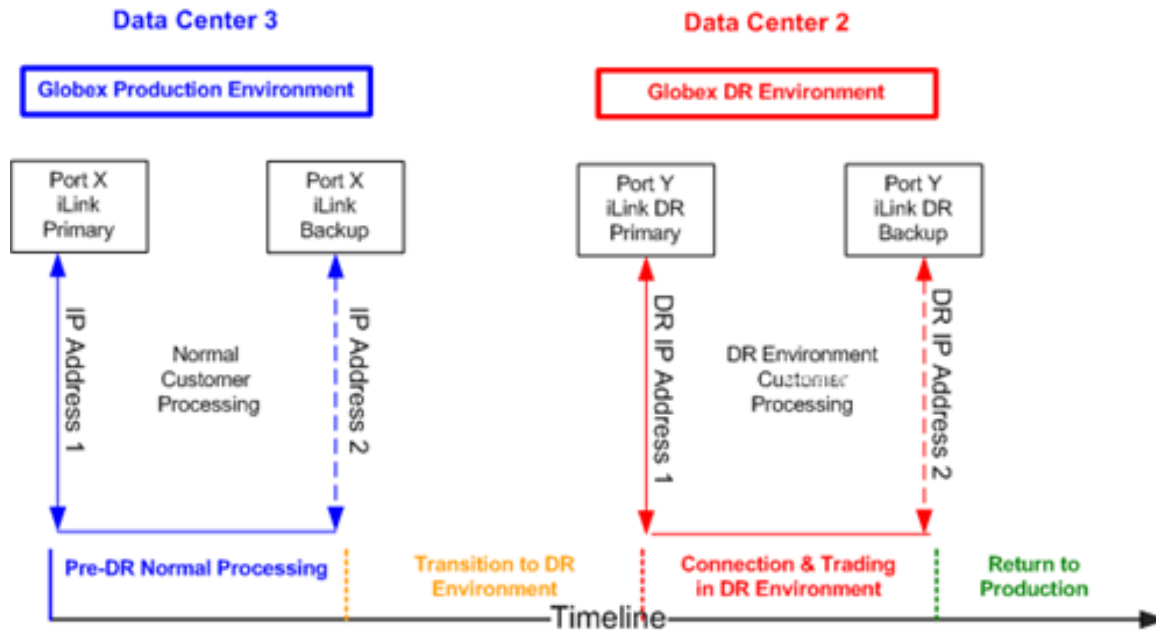
Note: The Clearing Production environment is at Data Center 2. A CME Globex DR event should not impact Clearing Production.

2.1 iLink and Drop Copy

After notification that a DR event has occurred, the customer will establish a new connection to the CME Globex DR environment using the two DR IP addresses and port provided to all iLink customers by Global Account Management (GAM).

Note: The Production IP addresses are different than the DR IP addresses for CME Globex iLink sessions. The port is the same.

The following figure shows how a customer connects to the CME Globex Production environment with an iLink session.



Note: Appendix B contains a summary table of the DR timeline and the activities that relate to a CME Globex iLink session.

2.1.1 Normal Production Processing (Pre-DR) – iLink and Drop Copy

CME Globex and your connection are in a normal production state.

2.1.2 DR Event – iLink and Drop Copy

As quickly as feasible, GCC will declare a DR event using the notification procedure described in the Introduction section of this document.

2.1.3 Transition to DR Environment - iLink and Drop Copy

In this state:

- Any existing CME Globex Production iLink and Drop Copy sessions are severed by CME Group.
- All open orders from CME Globex Production are unavailable and will be purged by the trading engine.
- Cancellation messages will not be sent to customers.
- Customers must clear their systems of any working orders.

- GCC will notify customers when net positions and cleared trades for CME Group cleared products are available in Front End Clearing. Customers should consult their Clearing firm for orders not cleared by CME.
- Customers in conjunction with their Clearing firm must begin reconciliation of open orders for entry into the DR environment.

2.1.3.1 Reconciliation

If a CME Globex DR event occurs, Clearing is the application of record for what has traded. GCC will announce an HH:MM:SS timestamp in the DR event notification message. Customers should verify with their Clearing firm the status of orders submitted at HH:MM:SS timestamp.

Client system must:

1. Retrieve all trades executed from CME Group Clearing or your Clearing firm at the HH:MM:SS timestamp provided by GCC.
2. Match these trades against order execution acknowledgements at the client front end or trading application.
 - If there are fills in Front End Clearing that were not acknowledged, then reduce the open order quantity for this order by the filled quantity.
 - If there are acknowledgements at the front end or trading application that were not shown in Front End Clearing, add the open order quantity in the acknowledgement back to the order.
 - GCC will communicate the DR event status and timeline to initiate the Pre-Open activities in the DR environment 45 minutes in advance of the Market opening.

2.1.4 Connection & Trading in DR Environment - iLink and Drop Copy

In this state:

- Establish the CME Globex DR connection using the DR IP addresses and port provided by GAM.
- Customers and Partner Exchanges must treat this as a Beginning of Week Logon and not a continuation of the Pre-DR event iLink session.
- The iLink session to the DR environment will be established using a Beginning of Week Logon described in [iLink 2.X Core Functionality](#) documentation.
- The Sequence Number <Tag34-MsgSeqNum=1> is set to one.
- The Order ID <Tag37-OrderID=1> consists of the Order Entry Date plus the Order Sequence and is set to one.

Note: The Order ID may not be unique in the case of a recovery that occurs in the same trading session.

- The Exec ID <tag17-EXecID> is a combination of the last 6 digits of the session sequence number, the date and the time. The date is 8 bytes, yyyyymmdd and the time is 6 bytes, hhmmss. <Tag17-ExecID" TN...000001">) is set to one.

Note: The Exec ID will always be unique in the case of a recovery.

- Pre-DR event iLink resends are not available.
- Pre-DR event application resends are not available with Drop Copy in the DR environment.
- An extended Pre-Open period of 45 minutes will be available to allow users to enter orders in the CME Globex DR environment.
- Cancel on Disconnect is enabled in the DR environment.

2.1.4.1 CME Globex Credit Controls in DR Environment

CME Globex Credit Controls is enabled in the DR environment. Limits remain as previously entered, and positions are re-set as if it was beginning of week.

2.1.5 Return to Production - iLink and Drop Copy

GCC will notify customers when the DR event is resolved and the timeframe for re-establishing the iLink and Drop Copy sessions back to the CME Globex Production environment using the Production IP addresses and one port. This reconnection to the CME Globex Production environment will be a scheduled procedure with sufficient notification time.

3. Market Data Platform

The Market Data Platform disseminates data in ITC and FIX/FAST formats. This section describes these formats.

Note: If the CME Group Trading Floor is not in a DR event, the ITC Floor feed will not be impacted by a CME Globex DR event.

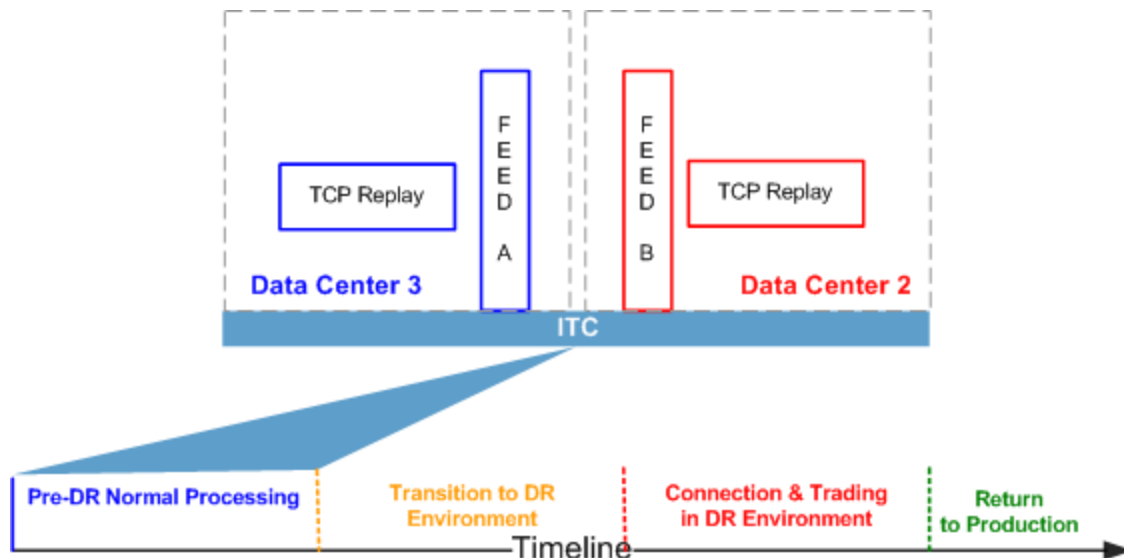
3.1 ITC Format

The Market Data Platform provides two identical feeds for data redundancy. Feed A is located at Data Center 3 and Feed B at Data Center 2. The following figure shows the two feeds at the data centers. If a CME Globex DR event occurs, only one market data feed is available, Feed B. There are no changes required for IP addresses for the two feeds if client systems are currently arbitrating between Feed A and Feed B.

Note: Appendix B contains a summary table of the DR timeline and the related activities for ITC formats.

3.1.1 Normal Production Processing (Pre-DR) ITC Format

The following figure displays a simplified diagram of the ITC architecture in the Normal Production Processing Pre-DR Environment.



In this state:

- Both feeds are available.
- TCP Replay is available.

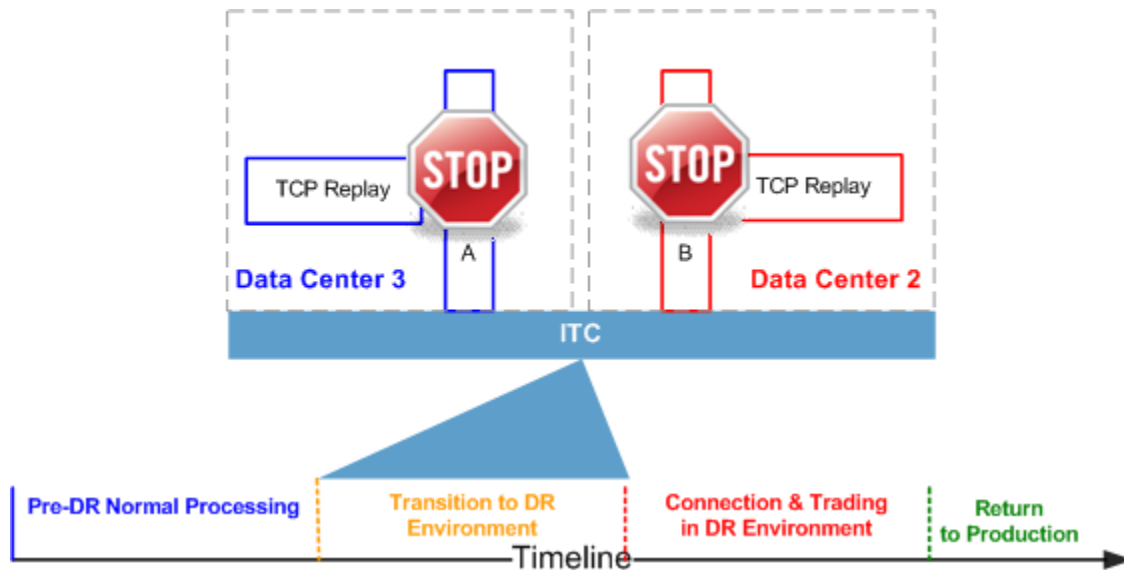
3.1.2 DR Event - ITC Format

As quickly as feasible, GCC will declare a DR event using the notification procedure described in the Introduction section of this document.

Client systems may notice Feed A is no longer active and Feed B is still only sending heartbeats.

3.1.3 Transition to DR Environment ITC Format

After the DR event, the architecture changes during the Transition to DR Environment stage depicted in the following figure.

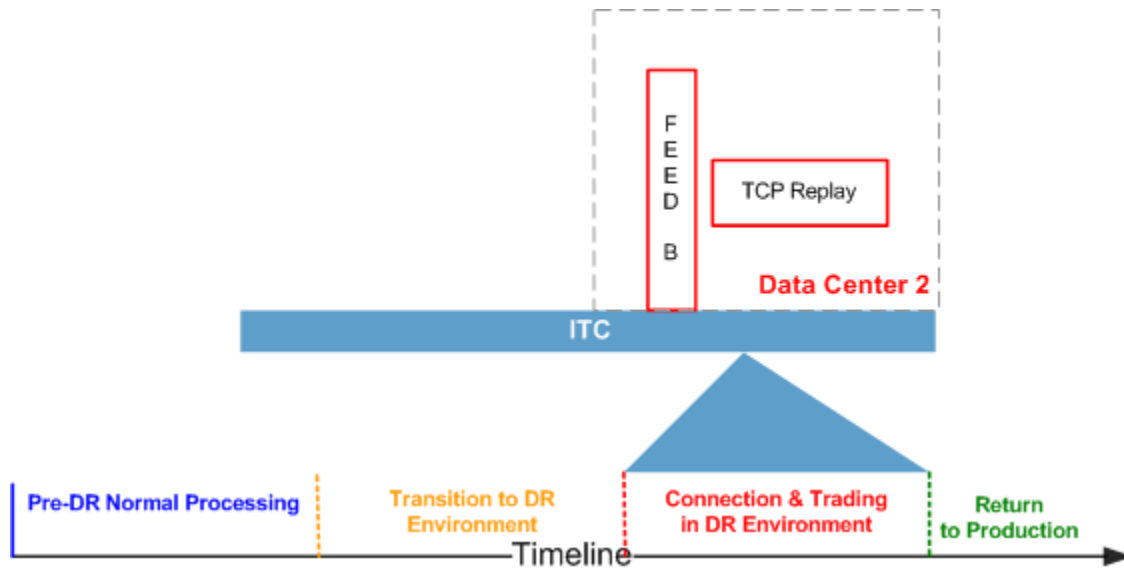


In this state:

- Feeds A and B are not available.
- TCP Replay requests are not available.
- GCC will communicate DR event status and timeline to begin the Pre-Open activities in the DR environment 45 minutes in advance of the Market opening.

3.1.4 Connection & Trading in DR Environment - ITC Format

After moving to Connection & Trading in the DR Environment, the architecture is depicted in the following figure.



In this state:

- Begin listening to Feed B.
- The connection starts with Beginning of Week processing.
 - Sequence numbers are reset.
 - Instrument definitions are sent.
- TCP Relay requests are available in the DR environment.
- TCP Replay requests are not available for Pre-DR event Market Data.
- All Feed B IP addresses will remain the same.

Note: Arbitration (Feed A and B) is used to reduce the likelihood that packets will be lost because two feeds exist with the same data. In the case of a DR event, Feed A is no longer available, therefore, there is no arbitration. This means that you will have to use recovery methods relevant to your format.

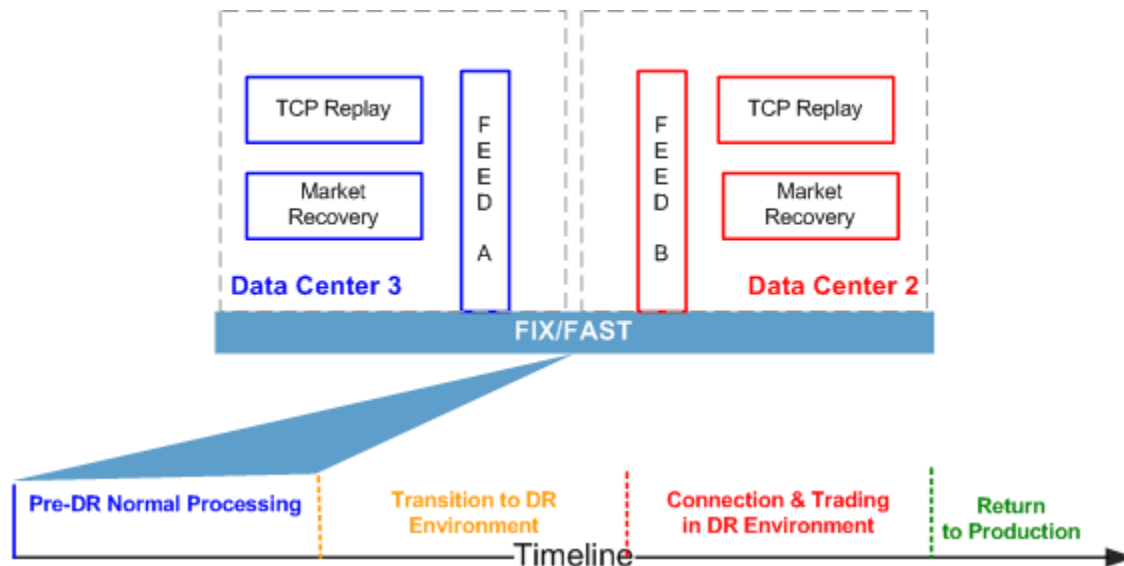
3.1.5 Return to Production - ITC Format

GCC will notify customers when the DR event is resolved and the timeframe for re-establishing the ITC connection back to the Production environment. This reconnection to the CME Globex Production environment will be a scheduled procedure with sufficient notification time.

3.2 FIX/FAST Format

The Market Data Platform FIX/FAST format provides two identical feeds for data redundancy. Feed A is located at Data Center 3 and Feed B at Data Center 2. The following figure shows the two MDP feeds at the data centers. If a CME Globex DR event occurs, only one market data feed is available, Feed B. There are no changes required for IP addresses for the two feeds if client systems are currently arbitrating between Feed A and Feed B.

Note: Appendix B contains a summary table of the DR timeline and the activities that relate to FIX/FAST format.



3.2.1 Normal Production Processing (Pre-DR) - FIX/FAST Format

The following figure displays a simplified version of the FIX/FAST format architecture in the normal Pre-DR Production Processing environment.

In this state:

- Both feeds are available.
- TCP Replay and Market Recovery are available.

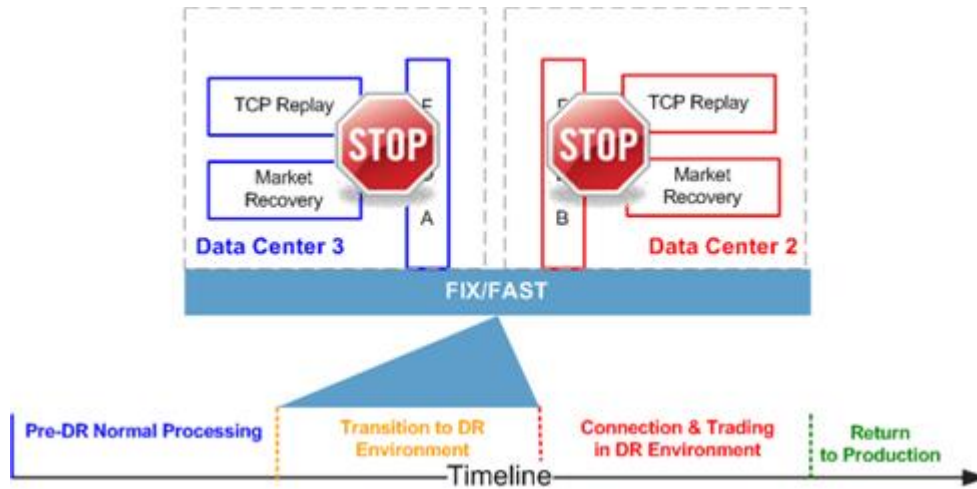
3.2.2 DR Event - FIX/FAST Format

As quickly as feasible, GCC will declare a DR event using the notification procedure described in the Introduction section of this document.

Client systems may notice Feed A is no longer active and Feed B is still only sending heartbeats.

3.2.3 Transition to DR Environment - FIX/FAST Format

After the DR event, the architecture changes during the Transition to DR Environment stage depicted in the following figure.

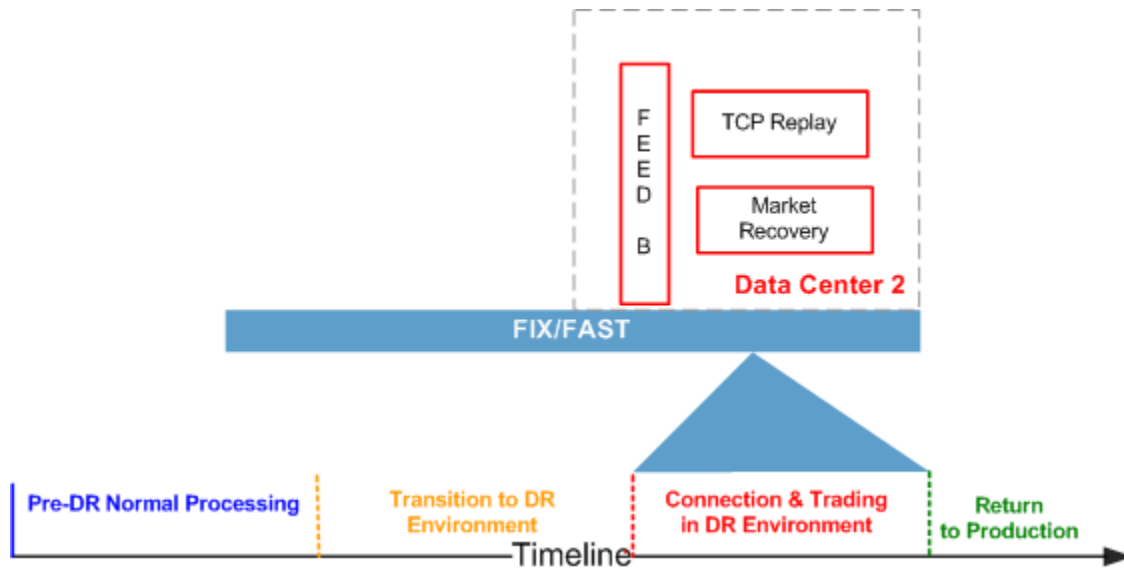


In this state:

- Feeds A and B are not available.
- TCP Replay and Market Recovery are not available.
- GCC will communicate DR event status and timeline to begin the Pre-Open activities in the DR environment 45 minutes in advance of the Market opening.

3.2.4 Connection & Trading in DR Environment - FIX/FAST Format

After moving to Connection & Trading in the DR Environment, the architecture is depicted in the following figure.



In this state:

- Begin listening to Feed B.
- The connection starts with Beginning of Week processing.
 - Sequence numbers are reset.
 - Instrument definitions are sent.
- TCP Replay and Market Recovery are available in the DR environment.
- TCP Replay and Market Recovery are not available for Pre-DR event Market Data.

All Feed B IP address will remain the same. To obtain FIX/FAST production IP addresses, Client system should use the Market Data Configuration Service. For addition information, refer to the Market Data Configuration Service at: <http://www.cmegroup.com/CMEGlobex/files/SDKFFCore.pdf>

3.2.5 Return to Production - FIX/FAST Format

GCC will notify customers when the DR event is resolved and the timeframe for re-establishing the FIX/FAST connection back to the Production environment. This reconnection to the CME Globex Production environment will be a scheduled procedure with sufficient notification time.

4. CME Group Front-End Applications

The following sections describe CME Globex DR environment processing for the following CME Group application products.

4.1 GALAX-C

GALAX-C, a CME Group-provided application and hardware, is available in wireless PDA and Tablet PC formats. Click the link for additional information on GALAX-C.

Note: Appendix C contains a summary table of the DR timeline and the activities that relate to GALAX-C.

4.1.1 Normal Production Processing (Pre-DR) - GALAX-C

GALAX-C and your connection are in a normal production state.

4.1.2 DR Event - GALAX-C

As quickly as feasible, GCC will declare a DR event using the notification procedure described in the Introduction section of this document.

4.1.3 Transition to DR Environment - GALAX-C

In this state:

- CME Globex is not available; however, GALAX-C handheld and tablet PC devices are still linked to a mid-tier communication area.
- All open orders from CME Globex Production are unavailable and will be purged by the trading engine.
- CME Group Trading Floor Technical staff will clear your handheld and tablet PC devices.
- GCC will notify customers when net positions and cleared trades for CME Group cleared products are available in Front End Clearing. Customers should consult their Clearing firm for orders not cleared by CME.
- Customers in conjunction with your Clearing firm must begin reconciliation of open orders for entry into the DR environment. See the Reconciliation section in the CME Globex section of this document.
- GCC will communicate the DR event status and timeline to initiate the Pre-Open activities in the DR environment 45 minutes in advance of the Market opening.

4.1.4 Connection & Trading in DR Environment - GALAX-C

After notification by GCC that the CME Globex DR environment is available, you can access GALAX-C through your normal connection method and sign on with your existing User Name and Password.

Note: Orders entered prior to the event will no longer be available.

4.1.5 Return to Production - GALAX-C

CME Group will notify customers when the DR event is resolved and the timeframe for connecting GALAX-C back to the Production environment. This reconnection to the Production environment will be a scheduled procedure with sufficient notification time.

4.2 EOS Trader

EOS Trader has access to CME Globex via a WAN or Internet connection. Both connections are available in the DR environment. Click the link for additional information on EOS Trader.

Note: Appendix C contains a summary table of the DR timeline and the activities that relate to EOS Trader.

4.2.1 Normal Production Processing (Pre-DR) - EOS Trader

EOS Trader and your connection are in a normal production state.

4.2.2 DR Event - EOS Trader

As quickly as feasible, GCC will declare a DR event using the notification procedure described in the Introduction section of this document.

4.2.3 Transition to DR Environment - EOS Trader

- All existing EOS Trader sessions (WAN and Internet) are severed by CME Group.
- All open orders from CME Globex Production are unavailable and will be purged by the trading engine.
- GCC will notify customers when net positions and cleared trades for CME Group cleared products are available in Front End Clearing. Customers should consult their Clearing firm for orders not cleared by CME.
- Customers in conjunction with your Clearing firm must begin reconciliation of open orders for entry into the DR environment. See the Reconciliation section in the CME Globex section of this document.
- GCC will communicate the DR event status and timeline to initiate the Pre-Open activities in the DR environment 45 minutes in advance of the Market opening.
- Pre-DR event unsaved changes to work spaces are not available.

4.2.3.1 WAN Connection

For EOS Trader sessions connected using a WAN, a new DR IP address <http://66.54.251.5:7501> is required.

4.2.3.2 Internet URL

EOS Trader access is available using the same Internet URL, <https://eostrader.cmegroup.com> in the DR environment.

4.2.4 Connection & Trading in DR Environment - EOS Trader

After notification by GCC that the CME Globex DR environment is available, you can access EOS Trader through your normal connection method and sign on with your existing User Name and Password.

Note: Orders entered prior to the event will no longer be available.

5. CME Group Support Tools

The following section describes the startup procedures for the CME Group support tools for a DR event.

5.1 FirmSoft

Note: Appendix D contains a summary table of the DR timeline and the respective activities that occur for FirmSoft.

5.1.1 Normal Pre-DR Processing - FirmSoft

FirmSoft is functioning normally.

5.1.2 DR Event - FirmSoft

As quickly as feasible, GCC will declare a DR event using the notification procedure described in the Introduction section of this document. The FirmSoft application will also display an alert.

All existing FirmSoft sessions are terminated by CME Group.

5.1.3 Transition to DR Environment - FirmSoft

After notification by GCC that the CME Globex DR environment is available, log into FirmSoft with your SmartClick ID. The FirmSoft URL will remain the same.

5.1.4 Connection to the DR Environment - FirmSoft

Sign into FirmSoft with the appropriate SmartClick ID. FirmSoft is ready to display orders entered into the DR environment. FirmSoft data will contain historical order activity information for 5 days, and any working orders from prior to the DR event, will be marked as eliminated.

5.1.5 Return to Production - FirmSoft

GCC will notify customers when the DR event is resolved and the timeframe for connecting FirmSoft back to the Production environment. This reconnection to the Production environment will be a scheduled procedure with sufficient notification time. Sign into FirmSoft with the appropriate SmartClick ID.

6. Disaster Recovery (DR) Testing

CME Group is enhancing DR testing and practices using two new programs:

1. CME Globex DR Connectivity Testing
2. Simulated CME Globex DR Testing

6.1 CME Globex DR Connectivity Testing

The purpose of this testing plan is to ensure that customers can establish a connection to the CME Globex DR environment using the DR IP addresses and port provided by GAM. Customers will be able to log into an iLink session, however, no order entry is permitted.

6.1.1 Connectivity Testing Schedule

To schedule a CME Globex Connectivity Test, contact your CME Global Account Manager.

6.1.2 Enrollment in Connectivity Testing

To participate in CME Globex Connectivity Testing, contact your CME Global Account Manager, GAM has previously communicated the DR IP addresses and port for this testing. The DR IP addresses and port are the same DR IP addresses and port that should be used for Testing and an actual DR event.

6.1.3 Technical Support During Connectivity Testing

Use the following to contact technical support during CME Globex Connectivity Testing

<http://www.cmegroup.com/globexdr/>

Department	Phone
GCC for Saturday DR Connectivity Testing	312-456-2391 or 44-20-7623-4708

6.2 Simulated CME Globex DR Testing

The Simulated CME Globex DR Testing program is a full-scale DR test for customers. The GCC will be available to answer any questions from 9:30 am - 1:30 pm CT.

Activity	Time
Customer Connectivity to DR (using DR IPs)	9:30 - 10:00 am CDT
Customer DR test (free swim, no script)	10:00 - 11:00 am CDT
Systems are Not Available for Customers *	11:00 am - 12:30 pm CDT
Production Available for Customer Connectivity	12:30 - 1:00 pm CDT

* Feel free to use the time between 11:00 am - 12:30 pm as break.

The dates will be announced at www.cmegroup.com/CME_Globexdr/

7. Appendix A: DR Communication Messages

The following section describes the type of messages you may see in the event of a DR. Additional messaging may be sent as necessary and are subject to change. These messages are based on the following critical benchmarks:

1. Time of failure
2. Time of last trade posted to clearing
3. Time CME Globex net positions are available
4. Time reconnection is allowed
5. Time ETA of trading is known
6. Time of market Pre-Opening
7. Market reopening complete

7.1 Time of Failure

CME Globex Level IV failure has been declared. Recovery procedures being initiated.

- AS OF MM/DD/YYYY HH:MM:
- The CME Globex trading system has been halted as of HH:MM.
- Last Match Processed by CME Group Clearing: Not yet determined
- Final Net Position for CME Group Contracts Only Available: Not yet determined
- Log-In Time: Not yet determined
- DR Environment Market Opening Time: Not yet determined
- Please consult <http://www.cmegroup.com> for an up-to-date status.

7.2 Time of Last Trade Posted to Clearing

Time of Last Trade Posted to Clearing is now available. For reconciliation purposes, the last CME Globex match processed by clearing occurred at HH:MM:SS. Orders with fills occurring after this time should be adjusted.

- AS OF MM/DD/YYYY HH:MM:
- The CME Globex trading system has been halted as of HH:MM.
- Last Match Processed by CME Group Clearing: HH:MM:SS
- Final Net Position for CME Group Contracts Only Available: Not yet determined
- Log-In Time: Not yet determined
- DR Environment Market Opening Time: Not yet determined

7.3 Time CME Group Net Positions Available

Net Position information is now available.

- AS OF MM/DD/YYYY HH:MM:
- Appendix A: DR Communication Messages
- CME Globex Version 1.6 Page 23
- The CME Globex trading system has been halted as of HH:MM.
- Last Match Processed by CME Group Clearing: HH:MM:SS

- Final Net Position for CME Group Contracts Only Available: HH:MM
- Log-In Time: Not yet determined
- DR Environment Market Opening Time: Not yet determined

7.4 Time Reconnection Allowed

DR System is operational. Users may now connect and Log-In. Contact the GCC at 312-456-2391 with any issues on Log-In.

- AS OF MM/DD/YYYY HH:MM
- The CME Globex trading system has been halted as of HH:MM.
- Last Match Processed by CME Group Clearing: HH:MM:SS
- Final Net Position Available: HH:MM
- Log-In Time: HH:MM
- DR Environment Market Opening Time: Not yet determined

7.5 Time ETA of Trading Known

Trading will commence at HH:MM following the standard opening rotation with a XX minute Pre-Opening.

- AS OF MM/DD/YYYY HH:MM
- The CME Globex trading system has been halted as of HH:MM.
- Last Match Processed by CME Group Clearing: HH:MM:SS
- Final Net Position Available: HH:MM
- Log-In Time: HH:MM
- DR Environment Market Opening Time: HH:MM

7.6 Time of Market Pre-Opening

Trading will commence at HH:MM following the standard opening rotation with a XX minute Pre-Opening

- AS OF MM/DD/YYYY HH:MM
- The CME Globex trading system has been halted as of HH:MM.
- Last Match Processed by CME Group Clearing: HH:MM:SS
- Final Net Position Available: HH:MM
- Log-In Time: HH:MM
- DR Environment Market Opening Time: HH:MM

7.7 Market Reopening Complete

No messages are sent to customers when the market has re-opened.

8. Appendix B: DR Time Line and CME Globex

DR Timeline	iLink	MDP ITC	MDP (FIX/FAST)
Normal Processing Pre-DR Event	CME Globex and your connection are in a normal production state.	Both feeds are available.	
		TCP Replay is available.	TCP Replay and Market Recovery are available.
DR Event	As quickly as feasible, GCC will declare a DR event using the notification procedure described in the Introduction.	Client systems may notice Feed A is no longer active and Feed B is still only sending heartbeats.	
Transition to DR Environment	Any existing CME Globex Production iLink sessions are severed by CME Group.	Feeds A and B are not available.	
	All open orders are unavailable and will be purged by the trading engine.	TCP Replay requests are not available.	TCP Replay and Market Recovery are not available.
	Customers must clear their systems of any working orders.	GCC will communicate the DR event status and timeline to initiate the Pre-Open activities in the DR environment 45 minutes in advance of the Market opening.	
	GCC will announce net positions and executions are accurate in Front End Clearing and available for customers with CME Cleared products. Consult your Clearing firm for orders not cleared by CME.		
	Customers in conjunction with their Clearing firm must begin reconciliation of open orders for entry into the DR environment.		
	GCC will communicate the DR event status and timeline to initiate the Pre-Open activities in the DR environment.		
Connection & Trading in the DR Environment	Establish the CME Globex DR connection using the DR IP addresses and port provided by GAM.	Begin listening to Feed B.	
	Customers must treat this as a Beginning of Week Logon and not a continuation of the Pre-DR event iLink session.	The connection starts with Beginning of Week processing.	
	The Sequence Number <Tag34-MsgSeqNum> is set to 1.	<ul style="list-style-type: none"> • Sequence numbers are reset. • Instrument definitions are sent. 	
	The Order ID <Tag37-OrderID> consists of the Order Entry Date plus the Order Sequence and is set to 1.	TCP Replay requests are available in the DR environment.	TCP Replay and Market Recovery are available in the DR environment.
	The Exec ID is a combination of the last 6 digits of the session sequence number, the date	TCP Replay requests are not available for Pre-DR event	TCP Replay and Market Recovery are not available for Pre-DR event Market

DR Timeline	iLink	MDP ITC	MDP (FIX/FAST)
	<p>and the time. The date is 8 bytes, yyyyymmdd and the time is 6 bytes, hhmmss. <Tag17-ExecID"TN...000001">) is set to 1.</p>	<p>Market Data.</p>	<p>Data.</p>
	<p>Pre-DR event iLink resends are not available.</p>	<p>All Feed B IP addresses will remain the same.</p>	
	<p>Pre-DR event application resends are not available with Drop Copy in the DR environment.</p>		
	<p>An extended Pre-Open period of 45 minutes will be available to allow users to enter orders in the CME Globex DR environment.</p>		
<p>Return to Production</p>	<p>GCC will notify customers when the DR event is resolved and the timeframe for re-establishing the iLink session back to the CME Globex Production environment using the Production IP addresses and one port. This reconnection to the CME Globex Production environment will be a scheduled procedure with sufficient notification time.</p>	<p>GCC will notify customers when the DR event is resolved and the timeframe for re-establishing the MDP connection back to the Production environment. This reconnection to the CME Globex Production environment will be a scheduled procedure with sufficient notification time.</p>	

9. Appendix C: DR Time Line and Front-End Applications

DR Timeline	GALAX-C	EOS Trader
Normal Processing PR-DR Event	Your front-end application GALAX-C or EOS Trader and your connection are in a normal production state.	
DR Event	As quickly as feasible, GCC will declare a DR event using the notification procedure described in the Introduction.	
Transition to DR Environment	CME Globex is not available, however, GALAX-C handheld and table PC devices are still linked to a midtier communication area.	All existing EOS Trader sessions are severed by CME Group. You will not be able to Login, although the Login displays.
	All open working orders from CME Globex Production are unavailable and will be purged by the trading engine.	
	CME Group Trading Floor Technical staff will clear your handheld and tablet PC devices.	Not applicable.
	GCC will announce net position and executions are accurate in Front End Clearing and available for customers with CME Cleared products. Consult your Clearing firm if orders are not cleared by CME Group.	
	Customers in conjunction with your Clearing firm must begin reconciliation of open orders for entry into the DR environment.	
	GCC will communicate the DR event status and timeline to initiate the Pre-Open activities in the DR environment 45 minutes in advance of the Market opening.	
	Not applicable.	For EOS Trader sessions connected using a WAN, a new DR IP address is http://66.54.251.5:7501 is required. EOS Trader access using the Internet is not available in the DR environment.
Connection & Trading in the DR Environment	After notification by GCC that the CME Globex DR environment is available, you can access GALAX-C through your normal connection method and sign on with your existing User Name and Password.	After notification by GCC that the CME Globex DR environment is available, you can access EOS Trader through your normal connection method and sign on with your existing User Name and Password.
Return to Production	GCC will notify customers when the DR event is resolved and the timeframe for connecting GALAX-C or EOS Trader back to the CME Globex Production environment. This reconnection to the Production environment will be a scheduled procedure with sufficient notification time.	

10. Appendix D: DR Time Line and Support Tools

DR Timeline	FirmSoft
Normal Pre-DR Processing	FirmSoft is functioning normally.
DR Event	As quickly as feasible, GCC will declare a DR event using the notification procedure described in the Introduction section of this document.
	All existing FirmSoft sessions are terminated by CME Group.
Transition to DR Environment	After notification by GCC that the CME Globex DR environment is available, log into FirmSoft using your SMARTClick ID.
Connection & Trading in DR Environment	Sign into FirmSoft with the appropriate User Name and Password. FirmSoft data will not contain historical order activity information from before the DR event, but is ready to accept orders entered into the DR environment.
Return to Production	GCC will notify customers when the DR event is resolved and the timeframe for re-establishing the FirmSoft connection back to the Production environment. This reconnection to the CME Globex Production environment will be a scheduled procedure with sufficient notification time.

11. Revision History

Version	Date	Author	Description
1.0		CR	Initial Release
1.1	1/15/2009	CR	Remove references for RLC.
1.2	12/30/2009	LM	Removed references to FXMarketSpace, TeleStat, EOS Citrix and E-quotes.
1.3	3/16/2010	CR	Updated section 6.2 Simulated CME Globex DR Testing.
1.4	9/10/2010	CR	Updated to reflect new Data Center 3.
1.5	9/15/2010	CR	Add schedule for testing in section 6.2.
1.6	2/7/2011	CR	Removed reference to connectivity testing schedules and removed online registration link.
1.7	8/12/2011	BLF	Removed all references to ATG inserted in v1.4.
1.8	9/8/2011	DT	Minor edits and corrections. Section 1.1: "Disaster Recovery Event Notification" <ul style="list-style-type: none"> • Removed non-registered contacts sections • Added GCC Targeted Messaging section
1.9	11/30/2011	DT	Added Asia telephone number to "Registered Contacts" in section 1.1: "Disaster Recovery Event Notification."