

**Notice No.:** TECH-2019-010

**Issue Date:** 01 March 2019

**Subject:** Site Failover Test - Mock Trading Session

Notice to all Members,

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The DGCX Group routinely performs testing from its secondary site as part of its wider Business Continuity/Disaster Recover plans (“BCP/DR plans”). To date, this testing has been internal and not involved third-parties. DGCX Group considers that it is important that its Members and Vendors should also participate in such tests, in order that the wider market community is better prepared in the event that a scenario exists which requires site failover procedures to be invoked.

Therefore, the Group will be scheduling a Mock Trading Session (“MTS”) on **Saturday 30 March 2019**, and this Notice provides further details of the MTS. Members and Vendors are strongly encouraged to participate in this MTS.

The MTS is designed to not only test connectivity to the Group’s secondary site, but also the ability to undertake trading and post-trade activities, resulting in a more comprehensive testing of respective BCP/DR plans. However, the MTS will NOT include POBE connectivity and those Members who have colocation access only at the Group’s primary site, will not be able to access this facility at the secondary site. Members and Vendors will be able to use EOS-Trader, EOS-Clear, PORTS (FIX), EMAPI, DropCopy, SSL & IPSEC VPN and Member FTP Server over their respective existing mode of network connectivity.

The MTS details are as follows:

PARTICULAR		DATE
<b>Mock Trading Session</b>		<b>Saturday, 30 March 2019</b>
ACTIVITY	UAE TIME (GMT+4)	DESCRIPTION
<b>NORMAL TRADING SESSION (PRIMARY SITE)</b>		
System Start	9:00 AM	System is available for login
Pre-Trade	10:00 AM	Persisted orders (e.g. GTC) are restored. Previous day settlement prices are disseminated
Continuous Trading	10:15 AM to 11:10 AM	Order entry / matching begins
Trade Halt	11:10 AM	All Users will be disconnected
A communication will be sent to market participants advising that the primary site is unavailable and that the market has been placed into Trade Halt status.		
<b>FAILOVER TRADING SESSION (SECONDARY SITE)</b>		
A second communication will be sent to market participants advising them to connect to the secondary site and that they should reconcile orders/trades/margins/etc.		

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Application login and verification	12:10 PM to 12:55 PM	Login to secondary site
A final communication will be sent to market participants at 12:55 PM advising that the Trade Halt will be lifted at 1:10 PM		
Resume Trading	1:10 PM	Trade Halt is lifted
Continuous Trading	1:10 PM	Order entry/matching is resumed from secondary site
End of Trading Session	1:40 PM	Order entry/matching stops
Back Office End Of Day	1:40 PM to 2:30 PM	End of Day activities are executed

## Procedures to be followed during the MTS

### 1. Login Procedure on Primary site

There is no change in the login procedure. Members/ Vendors can use their existing Live User IDs and corresponding passwords to login for the MTS using their existing connections.

EOS-Trader, EOS-Clear, Member FTP through F5 SSL VPN/ IPSec VPN connection.

EMAPI, PORTS/FIX and DropCopy using IPSec VPN, MPLS, Point to Point connection.

At the time stated above, all Users will be disconnected from the respective applications, and a communication will be sent to the market advising that the primary site is unavailable, and the market is in a Trade Halt status; Members/Vendors should wait for further instruction from the Exchange.

After receiving the confirmation from the Exchange that the failover to secondary site has been completed, all Users should connect to the secondary site in accordance with the details below. Physical connectivity to the secondary site will be established automatically.

### 1. Login Procedure on DR site

#### EOS-Trader

The configuration file of EOS-Trader contains the IP addresses of both primary and secondary sites. EOS-Trader will automatically search for the next available IP address and login automatically to the secondary site.

#### FIX / Drop Copy

Members and Vendors will need to login to the secondary site using the following IP address:

DGCX Server Name	Primary Site		Secondary Site	
	IP Address	Port	IP Address	Port
<b>FIX Gateway 1</b>	172.30.30.28	7250	172.30.30.128	7250

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<b>FIX Drop Copy 1</b>	172.30.30.28	7270	172.30.30.128	7270
<b>FIX Gateway 2</b>	172.30.30.29	7250	172.30.30.129	7250
<b>FIX Drop Copy 2</b>	172.30.30.29	7270	172.30.30.129	7270
<b>Member FTP / SFTP</b>	172.30.30.41	21/ 6022	172.30.30.141	21/ 6022
<b>Common FTP / SFTP</b>	eosftp.dgcx.ae	21/ 6022	eosftp.dgcx.ae	21/ 6022

In order to complete the login successfully, the user will be required to ensure that the Next Expected Sequence number is correct.

For example:

- Normal Session
  - Heartbeat request with sequence number (34) = 125
  - Heartbeat response with sequence number (34) = 207
  - Heartbeat request with sequence number (34) = 126
- Disconnection from Primary FIX Gateway
- Reconnection to Secondary FIX Gateway
  - Logon request with sequence number (34) = 127
  - Logout message (35=5) with text (58) = After fail-over, the user MUST set Next Expected Sequence number.
  - Logon request with sequence number (34) = 128 and Next Expected Sequence (789) =208
  - Response Logon Sequence number (34) = 208 (Successful Logon)

### EOS-Clear

The URL to login to EOS-Clear is <http://clear.dgcx.ae> will automatically be pointed to the secondary site.

For those Users who access via the IP address instead of the domain name, the details are as follows:

<http://172.30.30.124:8082/dgcx> OR <http://172.30.30.127:8082/dgcx>

### Market Data (MBL)

Members and Vendors will need to login onto the secondary site using the following IP address details:

DGCX Server Name	Primary Site			Secondary Site		
	IP Address	Multicast Group	Port	IP Address	Multicast Group	Port
<b>Primary Market Data Feed (EMAPI)</b>	172.30.30.32		6970	172.30.30.132		6970

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<b>Secondary Market Data Feed (EMAPI)</b>	172.30.30.33		6970	172.30.30.133		6970
<b>Primary Multicast Server-Price Level Flow 1</b>	172.30.30.30	239.20.255.255	17220	172.30.30.130	239.30.255.255	17221
<b>Primary Multicast Server-Trade Flow 1</b>	172.30.30.30	239.60.255.255	17224	172.30.30.130	239.70.255.255	17225
<b>Secondary Multicast Server-Price Level Flow 1</b>	172.30.30.31	239.40.255.255	17222	172.30.30.131	239.50.255.255	17223
<b>Secondary Multicast Server-Trade Flow 1</b>	172.30.30.31	239.80.255.255	17226	172.30.30.131	239.90.255.255	17227

### Market Data (POBE) and Colocation Services

As noted above, these services are only provided from the primary site and are therefore excluded from the MTS.

Prior to the resumption of trading at that secondary site, the market will remain in a Trade Halt state and no orders will have persisted from the earlier trading session – i.e. all orders, including GTC/GTDs will have been removed from the market as part of the failover process.

### Post Trading Activities

When trading ceases at 1:40 PM, standard back office reports will be generated and shall be available in the Live FTP Server (in a folder marked “Mock”). Members may download these reports from the FTP Server for verification purposes after 2:00 PM.

**These transactions will NOT result in any margin payments or obligations for pay-in/out.**

### Revert to Production Configuration (Existing Production)

Once the MTS has been completed Members and Vendors should take such steps as are necessary to be able to access the primary site on Monday 1 April 2019.

Members are requested to take note of the above and should contact the Support Desk if they require any further information.

### For Dubai Gold & Commodities Exchange

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