

**TO:** Montréal Exchange Participants  
**FROM:** Head, Customer Relations  
**SUBJECT:** MX Participation in the SIFMA, FIA and IIROC 2015 Disaster Recovery Tests  
**DATE:** August 7, 2015

The Montréal Exchange (MX) will be participating in the aligned Futures Industry Association’s (FIA), Securities Industry and Financial Markets Association (SIFMA) and the Investment Industry Regulatory Organization of Canada (IIROC) BC tests on Saturday, October 24, 2015, including the pre-connectivity test held on Saturday, September 26, 2015.

This document details the sequence of events during the Disaster. It also provides information on registration, pre-connectivity date and contact information.

**On Saturday October 24, 2015**

**Test day timelines overview**

Time	Access to Primary or back-up system	Instrument state
7:00 am - 7 :55 am	Primary	Pre-open
7:55 am - 11 :00 am*	No access	Market out of service
	7:55 - 9:00 disaster simulation 9:00 - 11:00 recovery	
Time of recovery until 1:30 pm	Back-up	15 minutes - Pre-Open
		Trading

\*System will be up at the latest by 11

## Pre-Failover

Starting at 7:00 am EDT, the Primary site (MCC) will be up and running and participants will be able to engage connectivity.

- Selected instrument will be in a pre-open phase. No trading will occur.
- MX will not be using its production database for these tests. The order book will be empty when tests starts Orders must be entered with October 24 date (day orders only)

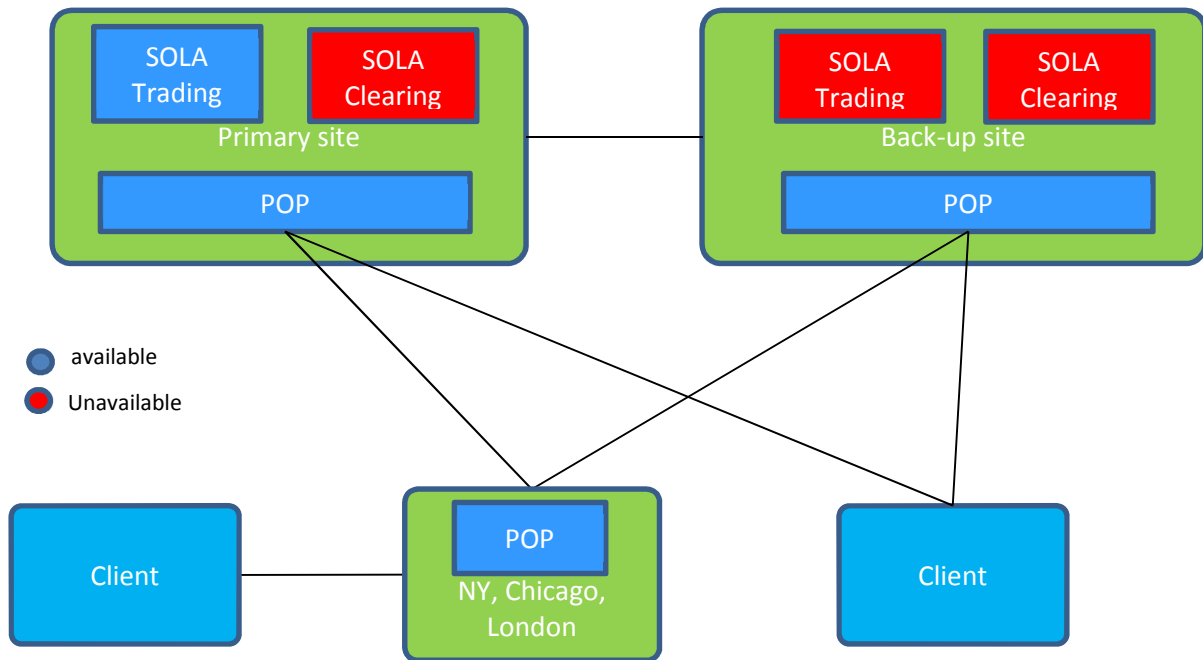


Figure 1

## Disaster simulation and recovery

Between 7:55 am to latest 11:00

- 7:55 am MX will abruptly interrupt SOLA trading and approximately in the 15 minutes that follows, the POP access will also be interrupted. In consequence the primary site will be isolated by a network failover as shown below in figure 2.

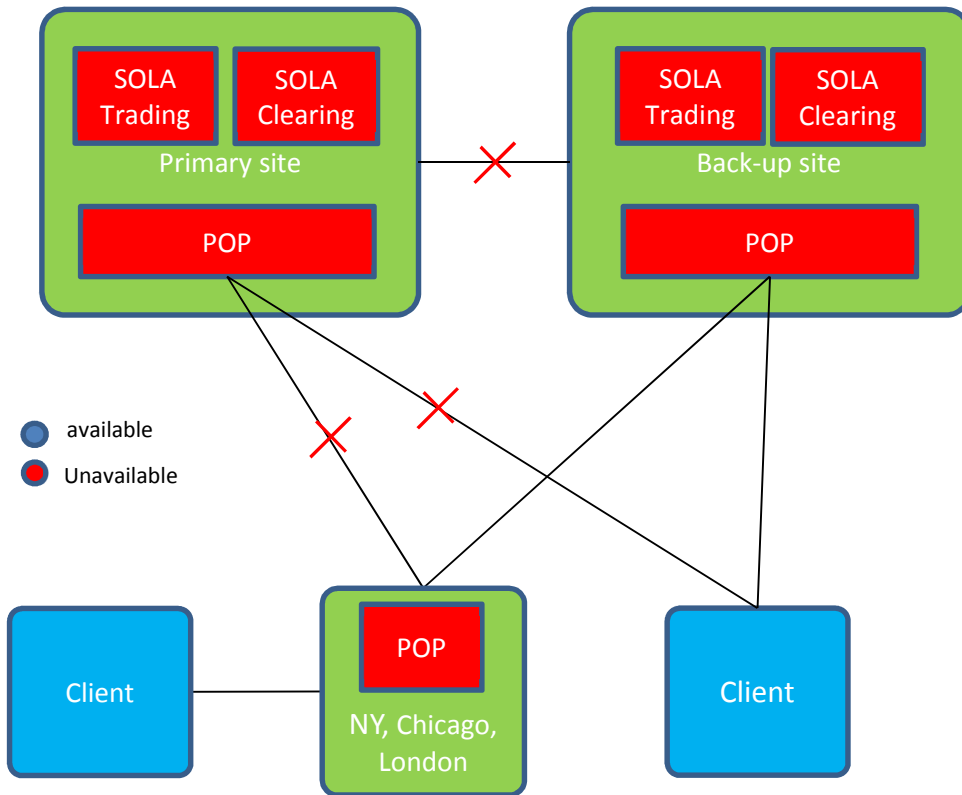


Figure 2

## Post-failover

Between 10:30 am - 11:00 am EDT, MX will have switched over to the back-up location in Toronto (DR site known as TCF).

- Immediately following the conclusion of our recovery process, we will offer a 15-minute pre-open period, followed by an instrument state change to allow for continuous trading. Products will remain in a tradable state until 1:30 pm EDT.
- There is no continuity between the pre-open session and this one. Our back-up system will start as if it were a new day. If you were previously connected to our system, please make sure to reset your system to avoid de-synchronization of messaging.
- All orders entered during the pre-failover period will have been purged from the system.
- During the test, MX Participants and ISVs will be able to connect to the MX Production network (IP & ports) from their Disaster Recovery (DR) environment. MX will redirect participants to the MX DR environment in a seamless fashion, as shown in Figure 3, below.
- MX Participants must be in a position to maintain their connectivity to the MX from TCF or to any of our Points of Presence (PoPs) as the MX will ensure connectivity.
- MX POPs are located in Markham, Toronto, Chicago, London, and New York.
- Participants will not be required to make network, DNS, or IP changes in order to connect to the MX DR site during the tests.
- MX will provide bids and offers for instruments. Participants will be able to lift or hit MX market. Firm IDs (mnemonic) representing the MX will be 901 and 902.
- During the exercise MX will be sending periodic status emails accordingly.

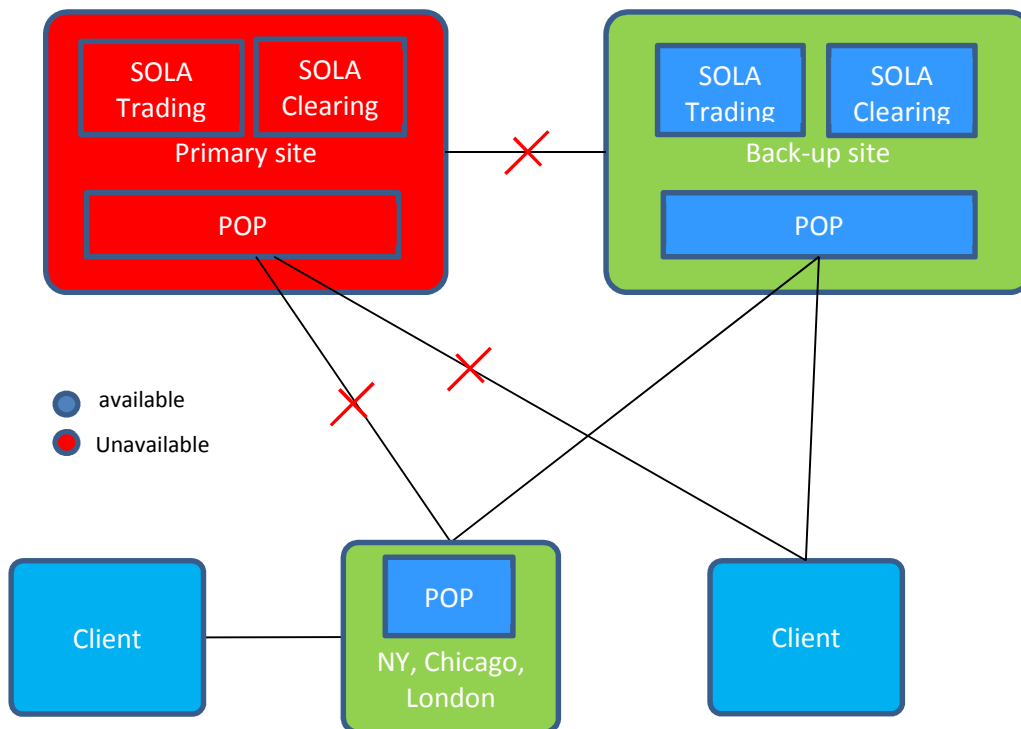


Figure 3

Scheduled testing appointments are not needed. If required, the Technical Help Desk (THD) and TMX Group IT support staff will be on-site and available to assist.

Please note: Tests will only be considered conclusive if a participant has traded.

Once your tests have completed, please send an email to [DR-BCSupport@m-x.ca](mailto:DR-BCSupport@m-x.ca) with the following:

**Participation to:** FIA and/or SIFMA and/or IIROC  
**Firm name and ID:** ABC / BDM004  
**Application tested:** ATR, TMS, HSVF, etc.  
**Successful trade on:** BAX, SXF, SXO, SU or MFC  
**Comments:** Describe any issues you may have encountered during the test, including how they were resolved or if further investigation is required.

Upon conclusion of our testing window at 1:30 pm EDT, the Production environment will be immediately brought down and scheduled for reactivation at its regular time on Sunday, October 25<sup>th</sup>, at 10:00 AM EDT. Please monitor your connections once your processes have reinitialized and report any issues or outages to the Technical Help Desk by phone at (514) 871-7872.

## Test symbols

Test Transaction	Transaction Type (buy/Sell)	Security Identifier (Symbol/CUSIP/ISIN)	Quantity	MX price	
				Buy	Sell
1	B/S	BAX November 2015 BAXX15	1	98.05	99.99
2	B/S	SXF June 2016 SXF16	1	850.00	870.00
3	B/S	SXO DC 15 770.00 Call (SXO 151218C770.00)	1	97.00	105.00
4	B/S	SU Jan 17 40.00 Put (SU 170120P40.00)	1	4.40	6.60
5	B/S	MFC Jan 17 22.00 Call (MFC 170120C22.00)	1	6.00	7.50

## MX Participants can test connectivity with the following services

SAIL	FIX	ATR
Drop Copy	TMS	Clearing API
MX FTP/SFTP Server (EOD and PAR Reports)	LOPR	HSVF (unicast & multicast)

## Test Registration

As we have three organizations sponsoring this annual test, we expect a large number of firms participating. To facilitate the coordination and appropriate level of communication on test day, please ensure to officially register working staff via the respective websites of the association or organization towards which your firm plans to participate. Please find links below:

FIA website

<https://secure.fia.org/bcp/test-registration.asp>

SIFMA website

<http://www.sifma.org/services/bcp/industry-testing/>

IIROC website

[Central Desktop Web Portal](#)

## Pre-Connectivity information

SIFMA-FIA-IIROC	Pre-Connectivity Test
Date	September 26, 2015
MX Participants Start Time	10 h
MX Participants End Time	13 h

The purpose of this test is to establish and confirm connectivity. As stated in the TMX Information Technology (IT) policy, “PING” testing is not permitted, therefore all MX Participants will need to connect to MX systems in order to test and validate connectivity.

MX Participants can test pre-connectivity with the following services

SAIL	FIX	ATR
Drop Copy	TMS	Clearing API
MX FTP/SFTP Server (EOD and PAR Reports)	LOPR	HSVF (unicast & multicast)

As long as testing is conducted between 10:00 am and 1:00 pm EDT, no testing appointments are required.

The Technical Help Desk (THD) and TMX IT Group support staff will be available to assist. Participants are required to advise THD by phone or email once they have successfully connected.

## Contact Information during the pre-test and test day

Technical Help Desk	Market Operations Department Test day only
Toll free : 1 877 588-8489	Toll free : 1 866 576-8836
Local : 514 871-7872	Local : 514 871-7877
<a href="mailto:DR-BCSupport@m-x.ca">DR-BCSupport@m-x.ca</a>	

For additional information on this notice, please contact Edwige Poupart, Head of Client Services, MX Financial Markets at 514-871-3590 or at [epoupart@m-x.ca](mailto:epoupart@m-x.ca).

We thank you for your cooperation.

Edwige Poupart  
Head, Customer Relations