ASX New Trading Platform Failover – 5/8/16

ASX will execute a Market Recovery dry run in production on 05 August 2016. ASX will initiate a Matching Engine (ME) failure to cause an unresponsive market, requiring ASX to halt the NTP Market. ASX will perform a Market Recovery to its Emergency Matching Engine at its Disaster Recovery (DR) site. This test will also occur as part of one of ASX's planned Implementation Rehearsals prior to go-live.

ASX strongly recommends customer involvement in this testing, which will cover the base incident management procedures utilising NTP functionality. Customers who wish to participate in the test should email CTS@asx.com.au. Participating customers would be requested to provide the names, phone number, and email addresses of contacts for the test.

ASX will run the test as per an incident with notification and updates to registered customers.

Failure Scenario

ASX runs the NTP Production environment with a Primary, Standby and Emergency Matching Engine. At 11:00am on Friday 05 August, ASX will fail to the Emergency ME. In this scenario, customers will still connect or re-connect to their primary gateways, however transactions will be processed by the ME at the ASX DR location.

This scenario could produce ME-initiated order cancellations, however this is unlikely. ASX will schedule further tests in August on the CDE environment which generate ME-initiated order cancellations for customers.

Approximate Scenario Timeline

Time	Activity	ASX	Participant
Thursday			
Anytime	Functional test preparation requirements, i.e. place GTC orders to confirm orders are retained.		✓
Friday			
08:00	Reminder communication is sent to customers who have subscribed	✓	
Anytime	NTP Production running as normal. Place trading day requirements for functional test preparation, i.e. Place orders.		✓
11:00	ASX will fail to the Emergency Matching Engine at its DR site. Customers will see:	✓	

	• Market in hang • FIX users will receive a Market Unresponsive message when placing transactions – Refer to the NTP Failover and Recovery Guide		
11:05	Communications distributed to customers of issue being investigated and NTP market is in an unresponsive state	✓	
11:10 – 11:20	Technical recovery. ASX will: • Promote EME • Restart FIX Market Data gateways	✓	
11:20	Communication sent to customers on reconnection requirements	✓	
11:40	Confirm customers are reconnected	✓	
11:45	Communications sent to customers to confirm market resumption times	✓	
12:00	Pre-open	✓	✓
12:10	Open	✓	✓
From Pre-Open	Functional tests evaluation and continuation Normal day processing		✓

The times from 11:00 are indicative and may be adjusted on the day.

Customer Connection Requirements

Refer to the NTP Failover and Recovery Guide; specifically the sections pertaining to Double Matching Engine failure. In summary the following is expected:

Connection Type	Configuration	Normal Start	Double Matching Engine Failure
FIX Order Entry	Primary / Standby	Log on to Primary	Possibility of orders cancelled – due to reverse handling for ME Recommended: • Requests status of active orders (OrderMassStatusRequest) • Request trades (TradeCaptureReportRequest, requires FIX Drop Copy)
FIX Market Data	Concurrent Subscribe to either	Log on	Gateways disconnected: • Reconnect using normal procedure
Market Data Protocol (ITCH)	Concurrent Dual subscription	See Market Data Protocol Specification Recommended to subscribe to both feeds at a site	Session shutdown and restarted: • A new session ID on start-up • Establish new picture using Glance • Use Blink to recover any gap between last Glance Sequence and first multicast sequence
FIX Drop Copy	Primary / Standby	Log on to Primary	Possibility of orders cancelled – due to ReverseHandling for ME Recommended: • Requests status of active orders (OrderMassStatusRequest) • Request trades (TradeCaptureReportRequest)
ASX Terminal	Primary / Standby Select instance	Logon – select instance	Logon – select instance