Johannesburg Stock Exchange

JSE Trading and Information Solution

JSE Guidance Note
Volume 201 – Guide to JSE Trading and Information Conformance

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1 DOCUMENT CONTROL

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1.2 Document Information

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1.3 Revision History

Date	Version	Sections	Description
27 March 2012	1.00	All	Initial Draft
28 March 2012	1.01	3&4	Revision for Conformance test scenarios
11 April 2012	1.02	4	Moved Instrument suspension from Trading to Information conformance section
13 April 2012	1.03	4	Corrected test scenario numbering
24 April 2012	1.04	4.2.4	Corrected the scenario description to align to requested results
25 April 2012	1.05	4	Corrected "unsuspend" wording in scenarios G1-001.4
1 September 2014	1.06	4	Additional Information Conformance confirming republished closing price. Introduction of Exclude Hidden Limit Orders, Same day cancellation of On Book Trade and News message on Trading Conformance. Change to General Conformance testing and removal of some FIX Session Handling test cases
18 April 2016	3.0	4	Updates to Equity Market functionality incorporated to include Cross Order functionality, Pegged Order enhancement and EOD Volume Auction. Addition of new Extended Statistics messages
4 July 2016	3.01	4.2	Removed duplicate scenario I13
24 February 2017	3.02	All	Inclusion of Derivative Markets Conformance test scenarios
30 August 2019	3.03	4.3.3 4.16	Removal of EHL Orders Inclusion of Iceberg Orders Conformance test Scenarios
20 February 2020	3.04	4.3.1	Update Changes to Password and New Password fields on the Logon message scenarios and Inclusion of Protocol Version message
		4.12	Inclusion of User Created Instruments – using Instrument ID conformance test Removal of Fwd Fwds conformance test case
		4.17	Inclusion of Liquidity Indicator Conformance test scenario
		4.18	Inclusion of Working Indicator Conformance test scenario
		4.19	Inclusion of Real Time Circuit Breaker Alerts to Brokers Conformance test scenario
20 November 2020	3.05	4.3.1	New Protocol version introduced: Icebergs - Logon to Protocol Version 2
		4.16	New Protocol version introduced: Icebergs - Logon to Protocol Version 2
		4.20	Introduction of Trading – FX Auction Automation
10 August 2021	3.06	4.3.5 4.3.6	Addition of conformance tests for Delayed Block Trades, Commission Fee
28 March 2024	3.07	4.3.1	New Protocol version introduced: Self-Match Prevention - Logon to Protocol Version 3
		4.3.3	Self-Match Prevention - Continuous Trading Limit Orders (Equity Market)
27 May <u>2024</u>	3.08	4.3.3	Self-Match Prevention - Continuous Trading Limit Orders (Equity Market) amendment
		4.21	Self-Match Prevention – Closing Price Cross Limit Orders (Equity Market)

1.4 References

The below API specification documents can be found within the JSE Client Portal, under the Technical Library link: https://clientportal.jse.co.za/technical-library/trading-and-market-data-documentation

- 1. Volume 01 Native Trading Gateway
- 2. Volume 02 Trading Gateway (FIX 50 SP2)
- 3. Volume 03 Post Trade Gateway (FIX 50 SP2)
- 4. Volume 04 Drop Copy Gateway (FIX 50 SP2)
- 5. Volume 05 Market Data Gateway (MITCH UDP)
- 6. Volume 06 Market Data Gateway (FAST UDP)
- 7. Volume 07 Indices Feed (FAST UDP)
- 8. Volume 08 Regulatory News Feed (FAST UDP)
- 9. Volume 09 JSE Reference Data Management

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2 OVERVIEW

The purpose of this document is to provide clients with all the essential and detailed information needed to get the most out of the JSE Conformance Test Service introduced as part of the JSE Trading and Information solution for the Equity Market, Currency Derivatives and Equity Derivatives Markets.

The JSE Conformance Test Service allows clients to prove the interface between their systems and the JSE's Trading and Information systems. The tests cover a range of functional areas and ultimately prove client systems can interact and behave as specified with the core architecture. Some of the events tested are frequently experienced during the trading day, while others are less frequently experienced.

The following documentation should be read in conjunction to this volume.

- Volume 00D Trading and information Overview for Derivatives Markets
- Volume 00E Trading and information Overview for Equity Market

3 SERVICE OVERVIEW

Clients are to conform all software applications that they wish to connect to the production environment. The self-conformance policy has been introduced in order to facilitate the conformance process. Mandatory testing is required for all Mandatory functions to ensure they comply with the Services Documentation.

Software applications requiring conformance include all interfaces that will directly connect to the JSE Trading and Information services for the Equity Market, Currency Derivatives and Equity Derivatives Markets.

3.1 Conformance Test Environment

Conformance testing will be conducted in the existing Customer Testing Service (CTS) environment. Prior to the commencement of the conformance test service, the JSE completes a rigorous readiness assessment on its central systems and networks to ensure that customer testing is conducted in a stable environment. Clients are encouraged to complete a similar self-assessment so that they can optimise their allocated test sessions, and do not disrupt testing for other clients. The JSE will verify that a client is ready for the conformance test service during the technical readiness test to CTS, which is mandatory for all participating clients.

3.2 Mandatory Testing for Trading Interfaces

The JSE Trading and Market solution for the Equity Market, Currency Derivatives and Equity Derivatives Markets consists of <u>five interfaces for Trading</u> as listed below. Clients must test against each of the interfaces they wish to access in production:

- Basic Native Trading Interface (for Equity Market)
- Enhanced Native Trading Interface (for all Derivatives Markets only)
- FIX 5.0 SP2 Trading Interface (for Equity Market)
- FIX 5.0 SP2 Post Trade Interface includes OTBD (Common across all markets)
- FIX 5.0 SP2 Drop Copy Interface includes OOBD (Common across all markets)

The Post Trade Interface is required to submit Trade Reports to the system and is mandatory for all trading applications operated by Trading Service Participants (TSPs), (i.e. members) of the JSE. This includes the Own Trade Book Download functionality (OTDB) of the Post Trade Gateway.

In addition, the Own Order Book Download functionality (OODB) of the Drop Copy Gateway is mandatory for all trading solutions operated by Trading Service Participants (TSPs), (i.e. members) of the JSE.

The OTBD and OOBD provide TSPs with the ability to recover all executed Trades and Open Orders in the event of a site failure at the JSE which may result in the failover to the JSE Remote DR Site.

3.3 Mandatory Testing for Information Interfaces

The JSE Trading and Market Data solution consists of <u>two interfaces for information</u> i.e. Market Data as listed below. Clients must test against each of these interfaces:

- Replay Service
- Recovery Service

Clients must prove that their software applications conform to the mandatory Replay and Recovery services as per the Services Documentation.

The JSE is investigating and automated procedure required to offering the following to clients in the CTS environment on a regular basis:

• The provision of a gap in the market data at a scheduled time daily and

3.4 Reference Data for Conformance tests

For conformance, clients must use the Reference Data FTP flat-file as provided for the CTS environment. This file is currently available for download on the JSE Information Delivery Portal (IDP) site via FTP.

For production and the CTS environment, the Reference Data FTP flat-files will be available for download via the JSE Information Delivery Portal (IDP). Clients must test against the JSE IDP service prior to go live.

3.5 High Volume Testing

The JSE is investigating the possibility of offering the following to clients:

 The provision of a High Volume Information service/test slot window to facilitate the testing of a client's applications to cope with a large increase in the volume and output rate at which market data is published

3.6 Conformance Test Analysts (CTAs)

The JSE will assign a Customer Test Analyst (CTA) to assist clients with specific parts of their conformance tests and to produce the test reports at the end of each test.

Clients will be able to perform the majority of their testing independently and only contact the CTA when they are satisfied with their test run results and require CTA involvement to perform either a support function and/or run the end of test report.

CTAs will be able to perform the following support functions:

- Suspend an Instrument
- Suspend an Interface User ID (CompID) this test should only be conducted once a client is satisfied
 that all required self-conformance test scenarios are successful.
- On Behalf of Actions for Trading Interfaces
 - Delete orders on the clients behalf
 - Submit trade reports on the clients behalf
 - Cancel a trade on the clients behalf
 - Generate a client-specific private News announcement
- CTA will run the end of Conformance test reports

3.7 Conformance Test Process

The conformance test process will be as follows:

- Clients must complete and submit the Conformance Test Report prior to conformance. This report
 outlines the functions supported by the software application being tested and will confirm the scope
 of the conformance test required.
- 2. Once the Conformance Test Report has been agreed with the JSE, clients can book a conformance slot.
- 3. Clients must book a conformance slot with the JSE Client Services Centre team.
- 4. Conformance test slots will be available weekly, on Tuesdays, Wednesdays and Thursdays that are business days for the JSE. I.e. should a public holiday occur on either of these days, conformance slots will not be available.
- 5. A booking is required to ensure a CTA is assigned to the conformance test. Clients must perform the self-conformance tests independently and only contact the CTA when they are satisfied with their test run results and require CTA involvement to perform either a support function and/or run the end of test report.
- 6. Clients cannot book more than one conformance slot per week.
- 7. Clients must complete all self-conformance tests within one JSE business day.
- 8. The conformance tests that require CTA support must be performed within JSE business hours, i.e. 07h00 19h00 SAST. In the event where these cannot be conducted within the same business day, the CTA will perform these with the client on the business day following the booked test slot.
- Conformance test results will only be made available 24-48 hours after successful processing of the end of test report.
- 10. Clients who fail a conformance test will need to redo the full conformance test.

11. Clients must remain connected / logged in to the service throughout the conformance tests and should only disconnect if instructed to do so as part of the test. Any deviations from the test activities will result in a conformance failure.

3.8 Conformance Test Report

The conformance test report is an electronic document that can be completed by the client and returned to the JSE prior to Conformance. The client must:

- 1. Prior to conformance, complete and submit the Conformance Test Report to the JSE confirming the scope of functionality of the software application being tested.
- 2. The software application functionality must be agreed with the JSE.
- 3. The client can then update the agreed Conformance Test Report with the self-conformance test results and return this to the JSE as part of their conformance test.

Please refer to Customer Test Documentation Volume 202 - Conformance Test Report.

3.9 Conformance Policy

It is mandatory to conform all software applications that clients wish to connect to the production environment. Any changes made to conformed software will result in a mandatory conformance test of the changed software.

In addition, any release of new functionality by the JSE could result in mandatory conformance, however not all releases will require conformance. The JSE will confirm per release if conformance is required.

Mandatory Conformance required for any new release implemented by the JSE unless otherwise stated by the JSE. Mandatory Conformance required for any changes made to conformed software unless otherwise agreed with the JSE.

3.10 Conformance Test Pricing

Pricing information can be found by contacting the JSE Client Services Centre.

4 CONFORMANCE TEST SCENARIOS

Detailed below are tests that a client must complete successfully to pass a conformance test.

Steps within each given scenario will apply to Trading Participants, Information Subscribers or both; in each case this will be clearly indicated.

Execute each step as documented and record the results of the execution in the Conformance Test Report. Clients are responsible for including all relevant accurate information per execution step in the test report. Inaccurate information will result in a failed conformance test.

If the result of an execution step does not match the expected result, document the actual result attained in the Conformance Test Report and provide all relevant information to unique identify the execution step. E.g. Firm ID, Interface User ID, Trader Group, Trader ID, Instrument ID etc.

Do not disconnect or logoff between each step of the execution unless instructed to do so in the execution test. Failure to comply with this requirement will result in a failed conformance test.

4.1 High Level Conformance Test Summary

	_	Info.	Trading
	Test Items Required	Solution	Solution
INFO	Information Conformance (Market Data)		
I1	Market Data – Level 1 FIX/FAST Replay Service	Υ	N
I2	Market Data – Indices FIX/FAST Replay Service	Υ	N
13	Market Data – Regulatory News FIX/FAST Replay Service	Y	N
I4	Market Data – Level 1 FIX/FAST Recovery Service	Υ	N
15	Market Data – Full Depth MITCH Replay Service	Υ	N
16	Market Data – Full Depth MITCH Recovery Service	Υ	N
17	Market Data – Instrument Suspension (Lvl1 & Full Depth)	Y	N
18	Market Data – Closing Price Market Data – Instrument Suspension (Lvl1 & Full Depth)	Y	N
I9	Market Data - Full Depth MITCH and/or Level 1 Replay Service -Extended Stats Message	Y	N
I10	Market Data - Full Depth MITCH and/or Level 1 Replay Service - Cross Order	Y	N
I11	Market Data - Full Depth MITCH and/or Level 1 Replay Service - Pegged Order	Y	N
I12	Market Data - Full Depth MITCH and/or Level 1 Replay Service - Volume Auction trade	Y	N
I13	Market Data - Full Depth MITCH and/or Level 1 Replay Service - EOD Volume Auction call trade	Y	N
TRD	Trading Conformance		
T1	Trading - Logon	N	Υ
T2	Trading – Auction Order Management	N	Y
T3	Trading – Continuous Trading Order Management	N	Y
T4	Trading - Native Trading Recovery	N	Y
T5	Post Trade – Single Sided Trade Reports	N	Υ
T6	Post Trade – Dual Sided Trade Reports	N	Υ
T7	Post Trade – On Book Cancellations	N	Y
T8	Post Trade – Own Trades Book Download (OTBD)	N	Y
T9	Drop Copy – Own Order Book Download (OOBD)	N	Y
T10	On Behalf of Actions (Native and FIX Trading)	N	Y
T11	Trading – Cross Order (FIX or Native, Drop Copy, Post Trade)	N	Y
T12	Trading – Pegged Order (FIX or Native, Drop Copy, Post Trade)	N	Y
T13	Trading – Pegged Limit Order (FIX or Native, Drop Copy, Post Trade)	N	Y
T14	Trading – EOD Volume Auction Uncross (FIX or Native, Drop Copy, Post Trade)	N	Y

T15	Trading - Quotes	N	Υ
T16	Trading - User-Created Instruments	N	Y
T17	Trading - On Book Strategies	N	Y
T18	Post Trade - Off-Book Strategies	N	Υ
T19	Trading - Calendar Spreads	N	Y
T20	Trading – Iceberg Orders	N	Y
T21	Trading - Liquidity Indicator field	N	Υ
T22	Trading - Working Indicator field	N	Υ
T23	Trading – Real Time Circuit Breaker Alerts	N	Y
T24	Trading - FX Auction Automation (Native)	N	Υ
Gen	General Conformance for all FIX Gateways		
G1	Error Handling	Υ	Υ
G2	FIX Session Handling	Υ	N

4.2 Information Conformance (Market Data)

4.2.1 I1, I2, I3 Market Data - Level 1 FIX/FAST Replay Service

Test Case ID:	Gateway Description	Mandatory	Self Conformance / Supported Test
I1-001	Market Data – Level 1 FIX/FAST Replay Service (Equity Market)		
12-001	Market Data – Indices FIX/FAST Replay Service (All Markets)	Y	Self Conformance per Gateway
13-001	Market Data – Regulatory News FIX/FAST Replay Service (All Markets)		per Galeway

Description:

Logon to the Replay Channel of each Gateway that you will subscribe to and send an Application Message Request to request the retransmission of a small range of messages already published on the real time (multicast channel.)

Comment:

The Application Message Request must be sent within 5 seconds of a successful logon.

#	Test Step	Expected Result	
1.	Establish a connection and logon to the Replay service	Successful Logon	
2.	Send An Application Message Request	Receive a successful Application Message Request Ack.	
		Receive requested messages.	
		Receive an Application Message Report to indicate completion of transmission.	
3.	Record the details of the Application Message Request sent in the Conformance Test Report	ApplReqID	
4.	Logout and Disconnect within 5 seconds of the transmission of the last missed message	Logout message sent by the client and connection terminated. If this is not done within the specified time, the server will send a Logout message and then break the TCP/IP connection with the client.	

4.2.2 I4 Market Data - Level 1 FIX/FAST Recovery Service

Test Case ID:	Gateway Description	Mandatory	Self Conformance / Supported Test
I4-001	Market Data – Level 1 FIX/FAST Recovery Service (Equity Market)	Y	Self Conformance

Description:

Logon to the Recovery Channel and send a Security Definition Request Message to request the details of all active instruments and all active instruments by segment.

Comment:

The Security Definition Request Message must be sent within 5 seconds of a successful logon.

#	Test Step	Expected Result
1.	Establish a connection and logon to the Recovery service	Successful Logon
2.	Send a Security Definition Request Message by segment	Receive a details of each each instrument via the Security Definition message
3.	Record the details of the Security Definition Request Message sent in the Conformance Test Report	SecurityReqID
4.	Send a Security Definition Request Message for all instruments	Receive a details of each each instrument via the Security Definition message
5.	Record the details of the Security Definition Request Message sent in the Conformance Test Report	SecurityReqID

Test Case ID:	Gateway Description	Mandatory	Self Conformance / Supported Test
14-002	Market Data – Level 1 FIX/FAST Recovery Service (Equity Market)	Y	Self Conformance

Stay logged in and send a Market Data Request message to request a snapshot of the current order book or statistics for one or more instruments in the market data group.

Comment:

The Market Data Request message must be sent within 5 seconds of the transmission of the last successful application message.

#	Test Step	Expected Result
1.	Send a Market Data Request message and request a snapshot of the current order book for multiple (2) instruments.	Receive a snapshot of the current order book for each instrument via a Market Data Snapshot (Full Refresh) message
2.	Record the details of the Market Data Request message sent in the Conformance Test Report	MDReqID
3.	Send a Market Data Request message and request a snapshot of the statistics for multiple (2) instrument.	Receive a snapshot of the statistics for each instrument via a Market Data Snapshot (Full Refresh) message
4.	Record the details of the Market Data Request message sent in the Conformance Test Report	MDReqID (262)

Test Case ID:	Gateway Description	Mandatory	Self Conformance / Supported Test
I4-003	Market Data – Level 1 FIX/FAST Recovery Service (Equity Market)	Y	Self Conformance

Stay logged in and send a Market Data Request message to request a snapshot of the current order book or statistics by segment

Comment:

The Market Data Request message must be sent within 5 seconds of the transmission of the last successful application message.

#	Test Step	Expected Result
1.	Send a Market Data Request message and request a snapshot of the current order book for a segment.	Receive a snapshot of the current order book for each instrument in the segment via a Market Data Snapshot (Full Refresh) message
2.	Record the details of the Market Data Request message sent in the Conformance Test Report	MDReqID (262)
3.	Send a Market Data Request message and request a snapshot of the statistics for a segment.	Receive a snapshot of the statistics for each instrument in the segment via a Market Data Snapshot (Full Refresh) message
4.	Record the details of the Market Data Request message sent in the Conformance Test Report	MDReqID (262)

Test Case ID:	Gateway Description	Mandatory	Self Conformance / Supported Test
14-004	Market Data – Level 1 FIX/FAST Recovery Service (Equity Market)	Y	Self Conformance

Stay logged in and send a Market Data Request message to request missed trades for one or more instruments in the market data group. Clients may also request missed trades for the instruments in the market data group that are assigned to one or more segments.

Comment:

The Market Data Request message must be sent within 5 seconds of the transmission of the last successful application message.

#	Test Step	Expected Result
1.	Send a Market Data Request message for missed Trades in a specific instrument.	Receive all the trades for the specified instruments via a Market Data Snapshot (Full Refresh) message
2.	Record the details of the Market Data Request message sent in the Conformance Test Report	MDReqID (262) SecurityID(48) ProductComplex (1227)
3.	Send a Market Data Request message for missed Trades in a segment	Receive all the trades for the specified segment via a Market Data Snapshot (Full Refresh) message
4.	Record the details of the Market Data Request message sent in the Conformance Test Report	MDReqID (262)
5.	Logout and Disconnect within 5 seconds of the transmission of the last application message	Logout message sent by the client and connection terminated. If this is not done within the specified time, the server will terminate the client connection.

4.2.3 I5 Market Data - Full Depth/Top of Book MITCH Replay Service

Test Case ID:	Gateway Description	Mandatory	Self Conformance / Supported Test
I5-001	Market Data – Full Depth MITCH Replay Service (All Markets)	Y	Self Conformance

Description:

Logon and send Replay Request to request retransmission of a limited number (small-scale) of messages already published on the Real-Time channel.

Comment:

The Replay Request message must be sent within 5 seconds of the transmission of the last successful application message.

#	Test Step	Expected Result
1.	Establish a connection and logon to the Replay service	Successful Logon
2.	Send a Replay Request message	Receive a successful Replay Response to the request. Receive requested messages.
3.	Record the details of the Replay Request message sent in the Conformance Test Report	Market Data Group First Message and Count
4.	Logout and Disconnect within 5 seconds of the transmission of the last application message	Logout message sent by the client and connection terminated. If this is not done within the specified time, the server will terminate the client connection.

I6 Market Data — Full Depth/To p of Book MITCH Recovery ServiceT est Case ID:	Gateway Description	Mandatory	Self-Conformance / Supported Test
16-001	Market Data – Full Depth MITCH Recovery Service (All Markets)	Y	Self-Conformance

Logon and send Snapshot Request to recover from a large-scale data loss (i.e. later joiner or major outage)

Comment:

The Snapshot Request message must be sent within 5 seconds of the transmission of the last successful application message.

#	Test Step	Expected Result
1.	Establish a connection and logon to the Replay service	Successful Logon
2.	Send a Snapshot Request message to request details of the order book for one instrument	Receive a successful Snapshot Response to the request.
		Receive the disseminated series of Add Order messages
		Receive the Snapshot Complete message
3.	Record the details of the Snapshot Request message sent in the Conformance Test Report	Sequence Number
	message sent in the comormance rest report	Segment
		Instrument ID
4.	Send a Snapshot Request message to request a snapshot of the current order book for all	Receive a successful Snapshot Response to the request.
	instruments in a segment	Receive the disseminated series of Add Order messages
		Receive the Snapshot Complete message
5.	Record the details of the Snapshot Request	Sequence Number
	message sent in the Conformance Test Report	Segment
		Instrument ID

6.	Send a Snapshot Request message to request a Statistics snapshot of the all sub books for all instruments in a segment	Receive a successful Snapshot Response to the request. Receive the disseminated series of Statistics messages Receive the Snapshot Complete
		message
7.	Record the details of the Snapshot Request	Sequence Number
	message sent in the Conformance Test Report	Segment
		Instrument ID
8.	Send a Snapshot Request message to request missed trades for all instruments in a particular	Receive a successful Snapshot Response to the request.
	segment	Receive the disseminated series of Recovery Trade messages
		Receive the Snapshot Complete message
9.	Record the details of the Snapshot Request	Sequence Number
	message sent in the Conformance Test Report	Segment
		Cogment
		Instrument ID
10.	Logout and Disconnect within 5 seconds of the transmission of the last application message	Logout message sent by the client and connection terminated. If this is not done within the specified time, the server will terminate the client connection.

Test Case ID:	Gateway Description	Mandatory	Self-Conformance / Supported Test
16-002	Market Data – Top of Book MITCH Recovery Service (Derivatives Markets)	Y	Self-Conformance

Logon and send Snapshot Request to recover from a large-scale data loss (i.e. later joiner or major outage)

Comment:

The Snapshot Request message must be sent within 5 seconds of the transmission of the last successful application message.

Activity Steps

#	Test Step	Expected Result
1.	Establish a connection and logon to the Replay service	Successful Logon
2.	Send a Snapshot Request message to request details of the Top of Book for one instrument	Receive a successful Snapshot Response to the request.
		Receive the disseminated series of Top of Book messages
		Receive the Snapshot Complete message
3.	Record the details of the Snapshot Request message sent in the Conformance Test Report	Sequence Number
	mossage some in the comormance rest report	Segment
		Instrument ID
4.	Send a Snapshot Request message to request details of the Top of Book per segment	Receive a successful Snapshot Response to the request.
		Receive the disseminated series of Top of Book messages
		Receive the Snapshot Complete message
5.	Record the details of the Snapshot Request message sent in the Conformance Test Report	Sequence Number
		Segment
		Instrument ID
6.	Logout and Disconnect within 5 seconds of the	Logout message sent by the
0.	transmission of the last application message	client and connection terminated. If this is not done within the specified time, the server will terminate the client connection.

4.2.4 **I7 Market Data – Instrument Suspension**

NOTE: This section must be repeated for Market Data Level 1 and/or Full Depth MITCH services.

Test Case ID:	Gateway Description	Mandatory	Self-Conformance / Supported Test
17 - 001	Market Data - Instrument Suspension (All Markets)	Y	Supported Test

CTA to suspend an Instrument. Client confirms receipt of the suspension and confirms the instrument closing price.

Comment:

Client to bind and subscribe to multicast data channel.

Call Customer Support to book time for executing this test with a CTA.

Activity Steps

#	Test Step	Expected Result
1.	Request Customer Test Analyst (CTA) to suspend an Instrument	Instrument successfully suspended.
		Receive Instrument status change of the suspended instrument and the published instrument closing price.
2.	Record the details of the suspended instrument in the Conformance Test Report	Interface User ID (CompID) Instrument ID Instrument Closing Price

4.2.5 **I8 Market Data – Closing Price**

NOTE: This section must be repeated for Market Data Level 1 and/or Full Depth MITCH services.

Test Case ID:	Gateway Description	Mandatory	Self Conformance / Supported Test
I8 - 001	Market Data – Closing Price (All Markets)	Y	Supported Test

Description:

CTA to reissue the Closing Price of an Instrument. Client confirms receipt and value of the updated Closing Price.

Comment:

Client to bind and subscribe to multicast data channel.

Call Customer Support to book time for executing this test with a CTA.

#	Test Step	Expected Result
1.	Request Customer Test Analyst (CTA) to reissue the Closing Price of an Instrument	Instrument Closing Price reissued
		Receive reissued Closing Price.
2.	Record the details of the reissued Closing	Interface User ID (CompID)
	Price of the instrument in the Conformance Test Report	Instrument ID
		Instrument Closing Price

4.2.6 I9 – Market Data - Full Depth MITCH and/or Level 1 Replay Service - Extended Stats Message

Test Case ID:	Gateway Description	Mandatory	Self-Conformance / Supported Test
109 - 001	Market Data - Full Depth MITCH and/or Level 1 Replay Service -Extended Stats Message (All Markets)	Y	Self-Conformance

Description:

Client requests a replay of a message where any of the below has changed:

- High Price (On Book/Off Book)
- Low Price (On Book/Off Book)
- Volume (On Book/Off Book)
- Number of Trades (On Book/Off Book)
- VWAP(On Book/Off Book)

Comment:

Client submits a replay request message where each of the above values have changed

#	Test Step	Expected Result
1.	Establish a connection and logon to the Replay service	Successful Logon
2.	Send a Replay message request	Receive a successful response to the request.
		Receive requested messages.
		In the extended stats message:
		High/low price updated for on/off book trade
		Volume updated
		Nr of Trades updated
		VWAP updated
		InstrumentID
3.	Record the details of the response sent in the Conformance Test Report	Sequence number
	Sememanos restrictor	Order Book
4.]Logout and Disconnect within 5 seconds of the transmission of the last application message	Logout message sent by the client and connection terminated. If this is not done within the specified time, the server will terminate the client connection.

4.2.7 I10 - Market Data - Full Depth MITCH and/or Level 1 Replay Service - Cross Order

Test ID:	Case	Gateway Description	Mandatory	Self-Conformance / Supported Test
I10 - 0	01	Market Data - Full Depth MITCH and/or Level 1 Replay Service - Cross Order (Equity Market)	Y	Self-Conformance
Descri	iption			
Client	reques	sts a replay of a Trade Message resulting fro	om a successf	ul Cross order
Activit	y Step	S		
#	Test	Step	Expected Result	
1.	Estab servi	olish a connection and logon to the Replay ce	Successful Logon	
2.	Send	a Replay message request	Receive a successful response to the request.	
			Receive requested message.	
3.		rd the details of the response message in the Conformance Test Report	Sequence number	
4.		ut and Disconnect within 5 seconds of the mission of the last application message	Logout message sent by the client and connection terminated. If this is not done within the specified time, the server will terminate the client connection.	

4.2.8 I11 - Market Data - Full Depth MITCH and/or Level 1 Replay Service - Pegged Order

Test ID:	Case	Gateway Description	Mandatory	Self-Conformance / Supported Test
I11 - 0	001	Market Data - Full Depth MITCH and/or Level 1 Replay Service - Pegged Order (Equity Market)	Y Self-Conforman	
Descr	iption			
Client	reques	sts a replay of a Trade Message resulting from	om a successf	ul Pegged Order
Activit	y Step	s		
#	Test	Step	Expected Result	
1.	Estab servi	olish a connection and logon to the Replay ce	Successful Logon	
2.	Send	a Replay message request	Receive a successful response to the request.	
			Receive requested message	
3.		ord the details of the response message in the Conformance Test Report	Sequence number	
4.		ut and Disconnect within 5 seconds of the mission of the last application message	Logout message sent by the client and connection terminated. If this is not done within the specified time, the server will terminate the client connection.	

4.2.9 I12- Market Data - Full Depth MITCH and/or Level 1 Replay Service - Volume Auction trade

Test Case ID:	Gateway Description	Mandatory	Self-Conformance / Supported Test
l12 - 001	Market Data - Full Depth MITCH and/or Level 1 Replay Service - Volume auction	Y	Self-Conformance
Description:			

Client requests a replay of a Trade Message resulting from a successful Volume auction trade

l122	Send a Replay message request	Receive a successful response to the request.		
		Receive requested message		
3.	Record the details of the response message sent in the Conformance Test Report	Sequence number		
4.	Logout and Disconnect within 5 seconds of the transmission of the last application message	Logout message sent by the client and connection terminated. If this is not done within the specified time, the server will terminate the client connection.		

4.2.10 I13- Market Data - Full Depth MITCH and/or Level 1 Replay Service - EOD Volume Auction call trade

Test ID:	Case	Gateway Description	Mandatory	Self-Conformance / Supported Test	
112I13 001	3 -	Market Data – Full Depth MITCH/Level 1 FIX/FAST Replay Service – EOD Volume Auction call (Equity Market)	Y	Self-Conformance	
Descr	Description:				
Activit	ty Step	s			
#	Test	Step	Expected Result		
1.	Estal servi	olish a connection and logon to the Replay ce	Successful Logon		
2.	Send	l a Replay message request	Receive a successful response to the request.		
			Receive requested message		
3.		ord the details of the response message in the Conformance Test Report	Sequence number		
4.		ut and Disconnect within 5 seconds of the mission of the last application message	Logout message sent by the client and connection terminated. If this is not done within the specified time, the server will terminate the client connection.		

4.3 Trading Conformance

NOTE: This section must be repeated for Native Trading/Native Enhanced Trading and FIX Trading, interfaces where applicable.

4.3.1 T1 Trading - Logon

Test Case ID:	FIX Trading Gateway	Mandatory	Self Conformance / Supported Test
T1-001	Trading Connect / Login (All Markets)	Y	Self Conformance
Description			

Description:

Establish a connection, Logon and change your password.

Comment:

The Logon message must be sent within 15 seconds of the transmission of establishing the TCP/IP connection.

#	Test Step	Expected Result
1.	Establish a connection and issue a Logon request message with new password to the Gateway	Successful Logon
2.	Successful login with new password accepted	Receive a successful Login Response. Logon Message to cater for a minimum of 12 and a maximum of 25 length (Only applicable to Native Gateway)
3.	Record the details of the Logon message sent in the Conformance Test Report	Interface User ID (CompID)

Test Case ID:	Native Trading Gateway	Mandatory	Self Conformance / Supported Test
T1-002	Trading Connect / Login (All Markets)	N	Self Conformance
Description:			

Establish a connection, Logon and change your password.

Comment:

Logged on to Protocol Version 2

Activity Steps

#	Test Step	Expected Result
1.	Log into the system using value '2' for the 'Protocol version' field in the Native Gateway 'Log on' message.	Successfully logged on to Protocol Version 2
2.	Successful login with new password accepted	Receive a successful Login Response. Logon Message to cater for a minimum of 12 and a maximum of 25 length (Only applicable to Native Gateway)
3.	Record the details of the Logon message sent in the Conformance Test Report	Interface User ID (CompID)

Test Case ID:	Native Trading Gateway	Mandatory	Self Conformance / Supported Test
<u>T1-003</u>	Trading Connect / Login (Equity Market)	<u>N</u>	Self Conformance

Description:

Establish a connection, Logon and change your password – Self-match prevention

Comment:

Logged on to Protocol Version 3

<u>#</u>	<u>Test Step</u>	Expected Result
1.	Log into the system using value '3' for the 'Protocol version' field in the Native Gateway 'Log on' message.	Successfully logged on to Protocol Version 3
2.	Successful login with new password accepted	Receive a successful Login Response. Logon Message to cater for a minimum of 12 and a maximum of 25 length (Only applicable to Native Gateway)
<u>3.</u>	Record the details of the Logon message sent in the Conformance Test Report	Interface User ID (CompID)

4.3.2 **T2 Trading – Auction Order Management**

NOTE: This section must be repeated for FIX Trading/Native Trading and Native Enhanced Trading interfaces where applicable.

Test Case ID:	Trading Gateway	Mandatory	Self Conformance / Supported Test
T2-001	Trading – Auction Market Orders (All Markets)	Y	Self Conformance

Description:

Validate Market Orders during an Auction period.

Comment:

Remain logged in from previous step. The test needs to be executed during the Opening/Closing auction session.

#	Test Step	Expected Result
1.	Enter a Market Order.	Receive an Execution Report.
	Assume there is a match for this order in the order book. If a matching order in the order book, please create one.	The order goes onto the order book and will be executed at the auction uncrossing.
2.	Order execution occurs at the auction uncrossing.	Receive an Execution Report.
3.	Record the details of the order message sent	Interface User ID (CompID)
	and the Execution Reports in the Conformance Test Report	Order ID
		Client Order ID
		Execution ID

Test Case ID:	Trading Gateway	Mandatory	Self Conformance / Supported Test
T2-002	Trading – Auction Limit Orders (All Markets)	Y	Self Conformance

Validate Limit Orders during an Auction period.

Comment:

Remain logged in from previous step. The test needs to be executed during the Opening/Closing auction session.

Activity Steps

#	Test Step	Expected Result
1.	Enter a Limit Order.	Receive an Execution Report.
	Assume there is a match for this order in the order book. If a matching order in the order book, please create one.	The order goes onto the order book and will be executed at the auction uncrossing.
2.	Order execution occurs at the auction uncrossing.	Receive an Execution Report.
3.	Record the details of the order message sent	Interface User ID (CompID)
	and the Execution Reports in the Conformance Test Report	Order ID
		Client Order ID
		Execution IDs
1		I

4.3.3 **T3 Trading – Continuous Trading Order Management**

NOTE: This section must be repeated for FIX Trading/Native Trading and Native Enhanced Trading interfaces where applicable.

Test Case ID:	Trading Gateway	Mandatory	Self Conformance / Supported Test
T3-001	Trading – Continuous Trading Market Orders (All Markets)	Y	Self Conformance

Validate Aggressive Market Orders during the Continuous Trading period. This is an unpriced order

Comment:

Remain logged in from previous step. The test needs to be executed during the Continuous Trading session.

Activity Steps

#	Test Step	Expected Result
1.	Enter an aggressive Market Order (IOC or FOK). Assume there is a match for this orders in the order book. If no matching orders exist in the order book, please create these.	The order executes immediately. Receive an Execution Report.
2.	Record the details of the order message sent and the Execution Report in the Conformance Test Report	Interface User ID (CompID) Order ID Client Order ID Execution ID

Test Case ID:	Trading Gateway	Mandatory	Self Conformance / Supported Test
T3-002	Trading – Continuous Trading Limit Orders (All Markets)	Y	Self Conformance

Description:

Validate Aggressive Limit Orders during the Continuous Trading period.

Comment:

Remain logged in from previous step. The test needs to be executed during the Continuous Trading session.

#	Test Step	Expected Result
1.	Enter an aggressive Limit Order (IOC or FOK).	The order executes immediately.
	Assume there is a match for this order in the order book. If no matching orders exist in the order book, please create these.	Receive an Execution Report.
2.	Record the details of the order message sent	Interface User ID (CompID)
	and the Execution Report in the Conformance Test Report	Order ID
		Client Order ID
		Execution IDs

Test Case ID:	Trading Gateway	Mandatory	Self Conformance / Supported Test
T3-003	Trading – Continuous Trading Limit Orders (All Markets)	Y	Self Conformance

Validate Passive Limit Orders during the Continuous Trading period.

Comment:

Remain logged in from previous step. The test needs to be executed during the Continuous Trading session.

#	Test Step	Expected Result
1.	Enter a passive Limit Order.	The order goes onto the order book.
		Receive an Execution Report.
2.	Assume there is a match for this order in the order book. If no matching orders exist in the	The order executes up to the limit price on the order.
	order book, please create one.	Receive an Execution Report.
3.	Record the details of the order message sent	Interface User ID (CompID)
	and the Execution Report in the Conformance Test Report	Order ID
	·	Client Order ID
		Execution Ids

Test Case ID:	Trading Gateway	Mandatory	Self Conformance / Supported Test
T3-004	Trading – Continuous Trading Stop Orders (All Markets)	Y	Self Conformance

Validate Stop Orders during the Continuous Trading period.

Comment:

Remain logged in from previous step. The test needs to be executed during the Continuous Trading session.

#	Test Step	Expected Result
1.	Enter a Stop Order.	The order gets a valid order status and will remain unelected. Receive an Execution Report.
2.	Assume there is a match for this order in the order book. If no matching orders exist in the order book, please create one.	The order is elected and executes until the stop price is reached. Receive an Execution Report.
3.	Record the details of the order message sent and the Execution Report in the Conformance Test Report	Interface User ID (CompID) Order ID Client Order ID Execution IDs

Test Case ID:	Trading Gateway	Mandatory	Self Conformance / Supported Test
T3-005	Trading – Continuous Trading Stop Limit Orders (All Markets)	Y	Self Conformance

Validate Stop Limit Orders during the Continuous Trading period.

Comment:

Remain logged in from previous step. The test needs to be executed during the Continuous Trading session.

#	Test Step	Expected Result
1.	Enter a Stop Limit Order.	The order will remain unelected until the stop price is reached. Receive an Execution Report.
2.	Assume there is a match for this order in the order book. If no matching orders exist in the order book, please create one.	The order is elected and executes. Receive an Execution Report.
3.	Record the details of the order message sent and the Execution Report in the Conformance Test Report	Interface User ID (CompID) Order ID Client Order ID Execution IDs

Test Case ID:	Trading Gateway	Mandatory	Self Conformance / Supported Test
T3-006	Trading - Continuous Trading Amend Orders (All Markets)	Y	Self Conformance

Validate Order modification during the Continuous Trading period.

Comment:

Remain logged in from previous step. The test needs to be executed during the Continuous Trading session.

#	Test Step	Expected Result
1.	Enter an Order.	The order is successfully submitted and resides on the order book.
	Assume there is no matching order for this order in the order book.	Receive an Execution Report.
2.	Amend the Order.	The order is successfully amended. Receive an Execution Report.
3.	Record the details of the order messages sent and the Execution Report in the Conformance Test Report	Interface User ID (CompID) Order ID Client Order ID Execution IDs

Test Case ID:	Trading Gateway	Mandatory	Self-Conformance / Supported Test
T3-007	Trading - Continuous Trading Cancel Order (All Markets)	Y	Self-Conformance

Validate Order cancellation during the Continuous Trading period.

Comment:

Remain logged in from previous step. The test needs to be executed during the Continuous Trading session.

#	Test Step	Expected Result
1.	Enter an Order.	The order is successfully submitted and resides on the order book.
	Assume there is no matching order for this order in the order book.	Receive an Execution Report.
2.	Cancel the Order.	The order is successfully cancelled.
		Receive an Execution Report.
3.	Record the details of the order messages sent	Interface User ID (CompID)
	and the Execution Report in the Conformance Test Report	Order ID
		Client Order ID
		Execution IDs

Test Case ID:	Trading Gateway	Mandatory	Self-Conformance / Supported Test
T3-008	Trading – Continuous Trading Order Mass Cancel (All Markets)	Y	Self-Conformance

Validate Order Mass Cancel during the Continuous Trading period.

Comment:

Remain logged in from previous step. The test needs to be executed during the Continuous Trading session.

#	Test Step	Expected Result
1.	Enter 5 Order non-executable regular orders	The orders are successfully submitted and reside on the order book.
	Ensure there are no matching orders for these orders in the order book.	Receive Execution Reports.
2.	Cancel all open orders.	The orders are successfully cancelled.
		Receive Execution Reports and Order Mass Cancel Report.
3.	Record the details of the order messages sent,	Interface User ID (CompID)
	Order Mass Cancel Report and the Execution Reports in the Conformance Test Report	Order IDs
	Tropono in ino como inaliza i soci topon	Client Order IDs
		Execution IDs
		Sequence No (Order Mass Cancel Report)

Test Case ID:	Trading Gateway	Mandatory	Self-Conformance / Supported Test
T3-09	Trading – Continuous Trading Cancel on disconnect (All Markets)	Y	Self-Conformance

Validate Cancel on disconnect.

Comment:

Remain logged in from previous step. The test needs to be executed during the Continuous Trading session.

#	Test Step	Expected Result
1.	Enter 5 Order non-executable regular orders	The orders are successfully submitted and reside on the order book.
	Ensure there are no matching orders for these orders in the order book.	Receive Execution Reports.
2.	Terminate the session by generating a TCP disconnect for Cancel on disconnect.	Client session is terminated.
3.	Establish a connection and Logon	Successful Logon.
4.	Verify the status of orders entered in step 1	All orders are cancelled.
		Receive Execution Reports for cancelled orders.
		NOTE: For Native Trading, recover missed messages via the recovery channel)
3.	Record the details of the order messages sent	Interface User ID (CompID)
	and the Execution Reports in the Conformance Test Report	Order IDs
		Client Order IDs
		Execution IDs

Test Case ID:	Native Enhanced Trading Gateway	Mandatory	Self-Conformance / Supported Test
T3-011	Trading – Continuous Trading Market to Limit Orders (Derivative)	Y	Self-Conformance

Validate Market to Limit Order during the Continuous Trading period.

Comment:

Remain logged in from previous step. The test needs to be executed during the Continuous Trading session.

Activity Steps

#	Test Step	Expected Result
1.	Enter a Market to Limit Order.	Receive an Execution Report.
2.	Assume there is a partial match for this order in the order book. If no matching orders exist in	The order is partially matched and executes.
	the order book, please create one.	Receive an Execution Report.
3.	Record the details of the order message sent	Interface User ID (CompID)
	and the Execution Report in the Conformance Test Report	Order ID
		Client Order ID
		Execution IDs

Test Case ID:	Native Enhanced Trading Gateway	Mandatory	Self-Conformance / Supported Test
T3-012	Trading – Continuous Trading Market if touched Orders (Derivative)	Y	Self-Conformance

Description:

Validate Market if Touched Order during the Continuous Trading period.

Comment:

Remain logged in from previous step. The test needs to be executed during the Continuous Trading session.

#	Test Step	Expected Result
1.	Enter a Market if Touched Order.	The order will remain unelected until the trigger price is reached. Receive an Execution Report.
2.	Assume there is a match for this order in the order book. If no matching orders exist in the order book, please create one.	The order is elected and executes. Receive an Execution Report.
3.	Record the details of the order message sent and the Execution Report in the Conformance Test Report	Interface User ID (CompID) Order ID Client Order ID Execution IDs

Test Case ID:	Native Trading Gateway	Mandatory	Self-Conformance / Supported Test
<u>T3-013</u>	Native Trading - Self - Match Prevention Continuous Trading Limit Orders (Equity Market)	<u>N</u>	Self-Conformance

Validate Aggressive Limit Orders that are Prevented from Self-Matching.

Comment:

Ensure login to the Basic Native Trading Gateway using protocol version 3. The test needs to be executed during the Continuous Trading session.

<u>#</u>	<u>Test Step</u>	Expected Result
<u>1.</u>	Enter a Limit order (DAY) into the order book with a specific unique id.	Receive an Execution Report containing the Self Trade Prevention Key.
	Allowed TIF's: DAY, IOC, FOK, GTC, GTT, GFX, GTD CPX, AND GDX	
	Not allowed for: OPG, GFA, ATC	
2.	Enter an aggressive Limit order (DAY) with the same unique id as in step 1 that will potentially match with the resting order. The aggressive order will remain on the order book.	The resting order will be expired. Receive an Execution Report with status of Expiry containing the Self Trade Prevention Key of the orders.
3.	Record the details of the order message sent and the Execution Report in the Conformance Test Report	Interface User ID (CompID) Order ID Client Order ID Execution ID Self Trade Prevention Key

Test Case ID:	FIX Trading Gateway	Mandatory	Self-Conformance / Supported Test
<u>T3-014</u>	FIX Trading - Self - Match Prevention Continuous Trading Limit Orders (Equity Market)	<u>N</u>	Self-Conformance

Validate Aggressive Limit Orders that are Prevented from Self-Matching.

Comment:

Ensure login to the FIX Trading Gateway using protocol version 3. The test needs to be executed during the Continuous Trading session.

<u>#</u>	Test Step	Expected Result
1.	Enter a Limit order (DAY) into the order book with a specific unique id.	Receive an Execution Report containing the NoTrdKey (7714) field.
	Allowed TIF's: DAY, IOC, FOK, GTC, GTT, GFX, GTD CPX, AND GDX	
	Not allowed for: OPG, GFA, ATC	
2.	Enter an aggressive Limit order (DAY) with the same unique id that will potentially match with the resting order. The aggressive order will remain on the order book.	The resting order will be expired. Receive an Execution Report with status of Expiry containing the NoTrdKey (7714) field of the orders.
<u>3.</u>	Record the details of the order message sent and the Execution Report in the Conformance Test Report	Interface User ID (CompID) Order ID Client Order ID Execution ID NoTrdKey (7714)

Test Case ID:	FIX Trading Gateway	Mandatory	Self-Conformance / Supported Test
<u>T3-015</u>	FIX Trading - Self - Match Prevention Continuous Trading Limit Order Amendment (Equity Market)	<u>N</u>	Self-Conformance

<u>Validate correct</u> handling of order cancel/replace requests without the NoTrdKey field (FIX Trading Gateway)

Comment:

Ensure login to the FIX Trading Gateway using protocol version 3. The test needs to be executed during the Continuous Trading session.

<u>#</u>	<u>Test Step</u>	Expected Result
1.	Enter a Limit order (DAY) into the order book with a specific unique id.	Receive an Execution Report containing the NoTrdKey (7714) field.
	Allowed TIF's: DAY, IOC, FOK, GTC, GTT, GFX, GTD CPX, AND GDX	
	Not allowed for: OPG, GFA, ATC	
<u>2.</u>	Submit an order cancel / replace request for the resting order.	The NoTrdKey will not be able to be amended via the cancel / replace request. The order will successfully be amended.
3.	Record the details of the order message sent and the Execution Report in the Conformance Test Report	Interface User ID (CompID) Order ID Client Order ID Execution ID ExecType

Test Case ID:	Native Trading Gateway	Mandatory	Self-Conformance / Supported Test
<u>T3-01</u> 6	Native Trading - Self - Match Prevention Continuous Trading Limit Order Amendment (Equity Market)	<u>N</u>	Self-Conformance

<u>Validate correct handling of order cancel/replace requests without the Self Trade Prevention Key field (Native Trading Gateway)</u>

Comment:

Ensure login to the Native Trading Gateway using protocol version 3. The test needs to be executed during the Continuous Trading session.

<u>#</u>	<u>Test Step</u>	Expected Result
1.	Enter a Limit order (DAY) into the order book with a specific unique id.	Receive an Execution Report containing the Self Trade Prevention Key field.
	Allowed TIF's: DAY, IOC, FOK, GTC, GTT, GFX, GTD CPX, AND GDX	
	Not allowed for: OPG, GFA, ATC	
<u>2.</u>	Submit an order cancel / replace request for the resting order.	The Self Trade Prevention Key will not be able to be amended via the cancel / replace request.
		The order will successfully be amended.
<u>3.</u>	Record the details of the order message sent	Interface User ID (CompID)
	and the Execution Report in the Conformance Test Report	Order ID
		Client Order ID
		Execution ID
		<u>ExecType</u>

4.3.4 **T4 Trading – Native Trading Recovery**

NOTE: This section must be repeated for FIX Trading/Native Trading and Native Enhanced Trading interfaces where applicable.

Test Case ID:	Trading Gateway	Mandatory	Self-Conformance / Supported Test
T4-001	Trading – Recovering Missed Messages (All Markets)	Y	Self-Conformance

Description:

Prove Native Trading recovery of missed messages

Comment:

Remain logged in from previous step. The test needs to be executed during the Continuous Trading session. The same CompID must be used for both the Native Trading and Native Recovery service

#	Test Step	Expected Result
1.	Enter 5 Orders and disconnect.	Receive Execution Reports for orders.
		Successful logoff.
2.	Wait for a period of time to ensure your order has executed or expired.	Successful Logon to real time and recovery services.
	Connect and Logon to the real time recovery	Request missed messages.
	services with the same CompID.	Receive missed messages and
	Request missed messages.	Missed Message Report.
3.	Logout from the Native Recovery service within 3 heartbeat intervals.	Logout successfully and recovery session terminated.
	The recovery service will disconnect a client's connection if there is no activity for 3 heartbeats.	
4.	Record the details of the order messages sent	Interface User ID (CompID)
	and the missed message request in the Conformance Test Report	Order IDs
	, i	Client Order IDs
		CompID

4.4 Post Trade Gateway Conformance

4.3.5 **T5 Post Trade Gateway – Single Sided Trade Reporting**

Test Case I	D: Post Trade Gateway	Mandatory	Self-Conformance / Supported Test
T5-00	Post Trade Connect / Login (All Markets)	Y	Self-Conformance
Descr	ption:		
Establ	sh a connection, Logon and change your passw	ord.	
Comn	ent:		
If alrea	dy connected from Trading test sessions above	, please remain	logged in.
Activi	y Steps		
#	Test Step	Expected Re	sult
1.	Establish a connection and issue a Logon request message with new password to the Gateway	Successful Logon	
2.	Successful login with new password accepted	Receive a su Response	ccessful Login
3.	Record the details of the Logon message sent in the Conformance Test Report	Interface Use	er ID (CompID)

Test Case ID:	Post Trade Gateway	Mandatory	Self-Conformance / Supported Test
T5-002	Post Trade – Single Sided Trade Reporting (All Markets)	Y	Self-Conformance

Submit a single sided Trade Report

Comment:

You will already be connected from the previous test step. Submit a single sided trade report

Activity Steps

#	Tes	t Step	Expected Re	sult
1.	Sub	omit an Off Book single sided Trade Report	Trade Report successfully submitted.	
				ade Capture Report nd Trade Capture).
2.	2. Record the details of the Trade Report in the Conformance Test Report Trade Report ID		er ID (CompID)	
			Trade Report ID	
			Trade ID	
Test Case	ID:	Post Trade Gateway	Mandatory	Self-Conformance / Supported Test
T5-003 Post Trade – Single Sided Trade Reporting (All Markets)		Self-Conformance		

Description:

Same day cancel of a single sided Off Book Trade Report

Comment:

You will already be connected from the previous test step. Cancel a single sided trade report captured on the same day.

#	Test Step	Expected Result
1.	Submit an Off Book single sided Trade Report cancellation.	Trade Report cancellation successfully submitted.
		Receive a Trade Capture Report (TCR) Ack and Trade Capture Report (TCR).
2.	Record the details of the cancelled Trade	Interface User ID (CompID)
	Report in the Conformance Test Report.	Trade ID
		Trade Report ID

Test Case ID:	Post Trade Gateway	Mandatory	Self-Conformance / Supported Test
T5-004	Post Trade – Single Sided Trade Reporting (Equity Market)	Y	Self-Conformance

Next day cancel of a single sided published Off Book Trade Report. (LC)

Comment:

You will already be connected from the previous test step. Cancel a published single sided trade report captured on the previous day.

Activity Steps

#	Test Step	Expected Result
1.	Submit a next day Off Book single sided Trade Report cancellation of a published reported	Trade Report cancellation successfully submitted.
	trade.	Receive a Trade Capture Report (TCR) Ack and Trade Capture Report (TCR).
2.	Record the details of the cancelled Trade	Interface User ID (CompID)
	Report in the Conformance Test Report.	Trade ID
		Trade Report ID

Test Case ID:	Post Trade Gateway	Mandatory	Self-Conformance / Supported Test
T5-005	Post Trade – Single Sided Trade Reporting (Equity Market)	Υ	Self-Conformance

Description:

Next day cancel of a single sided non-published Off Book Trade Report. (NC)

Comment:

You will already be connected from the previous test step. Cancel a non-published single sided trade report captured on the previous day.

#	Test Step	Expected Result
1.	Submit a next day Off Book single sided Trade Report cancellation of a non-published reported trade.	Trade Report cancellation successfully submitted. Receive a Trade Capture Report (TCR) Ack and Trade Capture Report (TCR).
2.	Record the details of the cancelled Trade Report in the Conformance Test Report.	Interface User ID (CompID) Trade ID Trade Report ID

Test Case ID:	Post Trade Gateway	Mandatory	Self-Conformance / Supported Test
T5-006	Post Trade – Single Sided Trade Reports	N	Self-Conformance
Description			

Submit a delayed single-sided off book Block Trade (Equity Market)

Comment:

Activity Steps

#	Test Step	Expected Result
1.	Submit a delayed single-sided off book Block Trade	Trade Capture Report messages Receive a Trade Capture Report (TCR) Ack and Trade Capture Report (TCR).

Test Case ID:	Post Trade Gateway	Mandatory	Self-Conformance / Supported Test
T5-007	Post Trade – Single Sided Trade Reports	N	Self-Conformance

Description:

Submit a single-sided off book trade with commission type, commission fee fields (All Markets)

Comment:

#	Test Step	Expected Result
1.	Submit a single-sided off book trade with commission type, and commission fee fields.	Successful trade report submission.
		TCR Ack (AR) for rejections of trade request; or TCR Ack (AR) for acceptance of trade request via the Post Trade Gateway.
		TCR (AE) for the buy side of the trade; and TCR (AE) for the sell side of the trade via the DSG Post Trade Gateway.
		TCR (AE) for the buy side of the trade; and TCR (AE) for the sell side of the trade via the Post Trade Gateway

4.3.6 T6 Post Trade Gateway - Dual Sided Trade Reporting

Test Case ID	Post Trade Gateway	Mandatory	Self-Conformance / Supported Test
T6-00	Post Trade – Dual Sided Trade Reporting (All Markets)	Y	Self-Conformance

Description:

Submit a dual sided Trade Report.

Comment:

You will already be connected from the previous test step. Submit a dual sided trade report.

Activity Steps

#	Tes	t Step	Expected Result	
1.	Sub	omit an Off Book dual sided Trade Report.	Trade Report successfully submitted.	
	inte cou able cou	races will have 2 different FirmIDs i.e. nterparties to test with. Clients must be to accept/reject the trade as the nterparty to ensure a confirmed Trade port is generated.	Receive a Trade Capture Repo (TCR) Ack and Trade Capture Report (TCR).	
2.	_	cord the details of the Trade Report in the	Interface User ID (CompID)	
	Cor	official of the state of the st	Trade Report	t ID
			Trade ID	
Test Case	ID:	Post Trade Gateway	Mandatory Self-Conformanc / Supported Test	
T6-0	02	Post Trade – Dual Sided Trade Reporting (All Markets)	Y Self-Conforman	

Description:

Same day cancel of a dual sided Off Book Trade Report

Comment:

You will already be connected from the previous test step. Cancel a dual sided trade report captured on the same day.

#	Test Step	Expected Result
1.	Submit an Off Book dual sided Trade Report cancellation of a confirmed Trade.	Trade Report cancellation successfully submitted.
	Assuming all clients developing trading interfaces will have 2 different FirmIDs i.e. counterparties to test with. Clients must be able to accept/reject the trade as the counterparty to ensure a confirmed Trade Report is cancelled.	Receive a Trade Capture Report (TCR) Ack and Trade Capture Report (TCR).
2.	Record the details of the cancelled Trade Report in the Conformance Test Report.	Interface User ID (CompID) Trade ID Trade Report ID

Test Case ID:	Post Trade Gateway	Mandatory	Self-Conformance / Supported Test
T6-003	Post Trade – Dual Sided Trade Reporting (Equity Market)	Y	Self-Conformance

Next day cancel of a dual sided published Off Book Trade Report. (LC)

Comment:

You will already be connected from the previous test step. Cancel a published dual sided trade report captured on the previous day.

Activity Steps

#	Test Step	Expected Result
1.	Submit a next day Off Book dual sided Trade Report cancellation of a published reported trade.	Trade Report cancellation successfully submitted. Receive a Trade Capture Report (TCR) Ack and Trade Capture Report (TCR).
2.	Record the details of the cancelled Trade Report in the Conformance Test Report.	Interface User ID (CompID) Trade ID Trade Report ID

Test Case ID:	Post Trade Gateway	Mandatory	Self-Conformance / Supported Test
T6-004	Post Trade – Dual Sided Trade Reporting (Equity Market)	Υ	Self-Conformance

Description:

Next day cancel of a dual sided non-published Off Book Trade Report. (NC)

Comment:

You will already be connected from the previous test step. Cancel a non-published dual sided trade report captured on the previous day.

#	Test Step	Expected Result
1.	Submit a next day Off Book dual sided Trade Report cancellation of a non-published reported trade.	Trade Report cancellation successfully submitted. Receive a Trade Capture Report (TCR) Ack and Trade Capture Report (TCR).
2.	Record the details of the cancelled Trade Report in the Conformance Test Report.	Interface User ID (CompID) Trade ID Trade Report ID

Test Case I	D: Post Trade Gateway	Mandatory	Self-Conformance / Supported Test
T6-00	Post Trade – Dual Sided Trade Reporting (Equity Market)	N	Self-Conformance
Descri	iption:		
Submi	t a delayed dual-sided off book Block Trade		
Comm	nent:		
Activit	y Steps		
#	Test Step	Expected Result	
1.	Submit a delayed dual-sided off book Block	Trade Capture Report	

Test Case ID:	Post Trade Gateway	Mandatory	Self-Conformance / Supported Test
T6-006	Post Trade – Dual Sided Trade Reporting (All Markets)	Z	Self-Conformance

messages

Receive a Trade Capture Report (TCR) Ack and Trade Capture Report (TCR).

Description:

Trade

Submit a dual-sided off book trade with commission type, commission fee fields

Comment:

#	Test Step	Expected Result
1.	Submit a dual-sided off book trade with commission type, and commission fee fields.	Successful trade report submission
		Receive a TCR Ack (AR) notification of Request acceptance to initiating party; and TCR (AE) system notification of trade report to counter party.
		A TCR (AE) acceptance of the dual-sided off book trade is sent via the Post Trade Gateway and A TCR (AR) acknowledgement is sent via the Post Trade Gateway.
		A TCR (AE) will be sent to both the initiating and contra side via Post Trade Gateway.

4.3.7 T7 Post Trade Gateway – Post Contra Trade (PC)

Test Case ID:	Post Trade Gateway	Mandatory	Self-Conformance / Supported Test
T7-001	Post Trade – Trade Reporting (Equity Market)	Y	Self-Conformance

Description:

Correction of a previous day On Book Trade. (PC)

Comment:

You will already be connected from the previous test step. Cancel an On Book trade executed on the previous day.

Activity Steps

#	Test Step	Expected Result
1.	Submit a Post Contra Trade Report.	Trade Report cancellation successfully submitted.
		Receive a Trade Capture Report (TCR) Ack and Trade Capture Report (TCR).
2.	Record the details of the Post Contra Trade	Interface User ID (CompID)
	Report in the Conformance Test Report.	Trade ID
		Trade Report ID
		OrigTradeID
		OrigTradeDate

Test Case ID:	Post Trade Gateway	Mandatory	Self-Conformance / Supported Test
T7-002	Post Trade - Trade Cancellation (All Markets)	Y	Self-Conformance

Description:

Cancellation of a same day On Book Trade.

Comment:

You will already be connected from the previous test step. Cancel an On Book trade executed on the same day.

#	Test Step	Expected Result
1.	Submit a Trade Capture Report to cancel a same day On Book trade.	Trade Report cancellation successfully submitted.
		Receive a Trade Capture Report (TCR) Ack and Trade Capture Report (TCR).
2.	Record the details of the same day On Book	Interface User ID (CompID)
	cancellation Trade Capture Report in the Conformance Test Report.	Trade ID
	·	Trade Report ID
		OrigTradeID
		OrigTradeDate

4.3.8 T8 Post Trade - Own Trades Book Download (OTBD)

Test Case II	Post Trade Gateway	Mandatory	Self-Conformance / Supported Test		
T8-00	Post Trade – OTBD (All Markets)	Y	Self-Conformance		
Descri	Description:				
Submit	Own Trades Book Download Request.				
Comm	ent:				
You wil	l already be connected from the previous test st	ер.			
Activit	Activity Steps				
#	Test Step	Expected Re	sult		
1.	Submit a Trade Capture Report Request.	Receive a Trade Capture Report Request Ack.			
		Receive a Trade Capture Report(s) (TCRs) as requested.			
2.	2. Record the details of the Trade Capture Report Interface		Interface User ID (CompID)		
	Request in the Conformance Test Report.	Trade ID			
		Trade Reque	est ID		

4.5 T9 Drop Copy Gateway

Test Case I	Drop Copy Gateway	Mandatory	Self-Conformance / Supported Test		
T9-00	1 Drop Copy Connect / Login (All Markets)	Y	Self-Conformance		
Descri	otion:				
Establi	sh a connection, Logon and change your passv	word.			
Comm	ent:				
If alrea	dy connected from Trading test sessions above	e, please remain	logged in.		
Activit	y Steps				
#	Test Step	Expected Re	Expected Result		
1.	Establish a connection and issue a Logon request message with new password to the Gateway	Successful Logon			
2.	Successful login with new password accepted	Receive a successful Login Response			
3.	Record the details of the Logon message sent in the Conformance Test Report	Interface User ID (CompID)			

Test Case I	D: Drop Copy Gatewa	у	Mandatory	Self Conformance / Supported Test
T9-0	Drop Copy – OOBD	(All Markets)	Υ	Self Conformance
Descr	ption:			
Submi	t Own Order Book Downl	oad (OOBD) Request.		
Comn	ent:			
You w	Il already be connected f	rom the previous test s	step.	
Activi	y Steps			
#	Test Step		Expected Re	sult
1.	Submit a Mass Order St	atus Request.	each active of	der Group/Trader
2.	Record the details of the		Interface Use	er ID (CompID)
R	Request in the Conformance Test Report.	Mass Status Req ID		
			Trader Group)

4.6 T10 On Behalf of Actions (Native/Native Enhanced and FIX Trading)

NOTE: This section must be repeated for both Native/Native Enhanced Trading and FIX Trading interfaces.

Test Case ID:	Trading Gateways	Mandatory	Self-Conformance / Supported Test
T10 -001	Trading On Behalf Of (OBO) Actions (All Markets)	Y	Supported Test

Establish a connection and Logon. CTA to action OBO Order Cancel activity. Client confirms receipt of unsolicited messages.

Comment:

If already connected from Trading test sessions above, please remain logged in.

Call Customer Support to book time for executing this test with a CTA.

#	Test Step	Expected Result
1.	If required, establish a connection and issue a Logon request message.	Successful Logon
2.	Client to submit an Order.	Order successfully submitted and remains on the order book.
	Assuming there is no match for the order in the order book.	Receive Execution Report.
		Provide the Order ID and Client Order ID to CTA
3.	Request Customer Test Analyst (CTA) to cancel the order.	Order is successfully cancelled. Receive Execution Report with Execution Type (4)
4.	Record the details of the order message sent in the Conformance Test Report	Interface User ID (CompID) Order ID Client Order ID

Test Case ID:	Trading Gateways	Mandatory	Self-Conformance / Supported Test
T10 -002	Trading On Behalf Of (OBO) Actions (All Markets)	Y	Supported Test

CTA to action OBO Trade Cancel activity. Client confirms receipt of unsolicited messages.

Comment:

Client already connected from Trading test sessions above, please remain logged in. Call Customer Support to book time for executing this test with a CTA.

#	Test Step	Expected Result
1.	Client to generate an On Book Trade.	Order successfully submitted and executes.
	Assuming there is a match for the order submitted, otherwise please generate one.	Receive Execution Reports.
		Provide the Trade ID, Order ID and Client Order ID to the CTA
2.	Request Customer Test Analyst (CTA) to	Trade is successfully cancelled.
	cancel the On Book Trade.	Receive Execution Reports to cancel the Trade and reinstate the order
3.	Record the details of the trade/order message	Interface User ID (CompID)
	sent in the Conformance Test Report	Execution ID of Trade Cancel and Order reinstatement
		Trade ID
		Order ID
		Client Order ID

Test Case ID:	Post Trade Gateways	Mandatory	Self-Conformance / Supported Test
T10 -003	Trading On Behalf Of (OBO) Actions (All Markets)	Y	Supported Test

CTA to action OBO single sided Trade activity. Client confirms receipt of unsolicited messages.

Comment:

Client already connected from Trading test sessions above, please remain logged in. Call Customer Support to book time for executing this test with a CTA.

Activity Steps

#	Test Step	Expected Result
1.	Request Customer Test Analyst (CTA) to submit an Off Book trade report On Behalf Of the client.	Trade is successfully captured. Receive TCRs of the captured Trade Report.
2.	Record the details of the trade sent in the Conformance Test Report	Interface User ID (CompID) Trade ID Client Order ID

Test Case ID:	Trading Gateways	Mandatory	Self-Conformance / Supported Test
T10 -004	News message published by the Exchange (All Markets)	Y	Supported Test

Description:

CTA to publish a unique News message. Client confirms receipt of unsolicited messages.

Comment:

Client already connected from Trading test sessions above, please remain logged in. Call Customer Support to book time for executing this test with a CTA.

#	Test Step	Expected Result
1.	CTA publishes a unique message to the client.	News message successfully submitted.
	No actions required by the client	Receive News message.
		Provide the Trade ID, Order ID and Client Order ID to the CTA
2.	Record the details of the News message sent in the Conformance Test Report	Interface User ID (CompID) Unique text message received Instrument ID

4.4 T11 Trading – Cross Order (FIX or Native, FIX Drop Copy and FIX, Post Trade)

Test Case II	Trading – Cross Order (FIX or Native, FIX Drop Copy, Post Trade)	Mandatory	Self- Conformance / Supported Test
T11- 001	FIX or Native Gateway (Equity Market)	Y	Self- Conformance
Descri	ption:		
	ssfully submit a Cross Order on the FIX or Native	or FIX Trading	Gateways
Comm	ent:		
In orde	r for the Cross Order to be successfully submitted	d, TIF must be	DAY
Activity	Activity Steps		
#	Test Step	Expected Re	sult
1.	Enter a Cross Order during continuous trading	The order ex	ecutes immediately.
		Receive an E	xecution Report.
2.	Record the details of the order message sent	Interface Use	er ID (CompID)
	and the Execution Report in the Conformance Test Report	Security ID	
		Trader mnem	nonic
		ExecutionID	

Test Case ID:	Trading – Cross Orders (Drop Copy)	Mandatory	Self- Conformance / Supported Test
T11- 002	Drop Copy Gateway (Equity Market)	Y	Self- Conformance

Description:

Ensure the Cross Orders were the only orders submitted for this instrument. Log onto the Drop Copy Gateway and confirm there are no open orders for the instrument.

#	Test Step	Expected Result
1.	Log onto Drop Copy gateway	
	Request to view all open orders	Receive an Execution Report.report received
2.	Record the details of the execution report indicating no open orders	No open orders for specified instrument
		Interface User ID (CompID)

Test Case	D: Trading – Cross Orders	Mandatory	Self-Conformance / Supported Test		
T11- 003	Post Trade Gateway (Equity Market)	Y	Self-Conformance		
succe	Description: From the previous test case of successfully submitting a Cross Order, confirm the order is successful on the Post Trade Gateway Activity Steps				
#					
1.	Record the details of the Trade Capture Report of the successful Cross Order	Interface User ID (CompID) SecurityID Trade ID			

4.5 T12 Trading – Pegged Order (FIX or Native, FIX Drop Copy and FIX, Post Trade)

Test Case	ID:	Trading - Pegged Orders	Mandatory	Self- Conformance / Supported Test
T12- 001		FIX or Native Gateway Gateways (Equity Market)	Y	Self- Conformance
Descr	iptio	n:		
		y submit a Pegged Order on the FIX or Nativ	e or FIX Tradi	ng Gateways
Comn				
		the Pegged Order to be successfully submitt	ted, MES is ma	andatory.
Activi	ty St	eps		
#	Tes	t Step	Expected Re	sult
1.		er a Pegged Order during any of the below ling sessions:	The order is successfully submitted	
		 continuous trading 	Receive an Execution Report.	
		opening auction		
		 volatility action call 		
		intra-day auction call		
		• FCO		
2.		ord the details of the order message sent	Interface Use	er ID (CompID)
		the Execution Report in the Conformance t Report	Trader mnemonic	nonic
		- · · · · · · · · · · · · · · · · · · ·	Order ID	
			ClientOrderI	
			Instrument ID)

Test Case ID:	Trading – Pegged Orders	Mandatory	Self- Conformance / Supported Test
T12- 002	Drop Copy Gateway (Equity Market)	Y	Self- Conformance

From the previous test case, log onto the Drop Copy Gateway and confirm open orders exist specific to the Pegged Order submitted

Comment:

Logon to the Drop Copy Gateway and request to view all open orders

Activity Steps

#	Test Step	Expected Result		
1.	Log onto Drop Copy Gateway	Logon successful		
	Request to view all open orders for the relevant instrument	Receive an Execution Report with open orders for relevant instrument.		
2.	Record the details of the Execution Report in the Conformance Test Report	InstrumentID SecurityID		
		ClientOrderID		

Test Case ID:	Trading – Pegged Orders	Mandatory	Self- Conformance / Supported Test
T12- 003	Post Trade Gateway (Equity Market)	Y	Self- Conformance

Description:

Submit an order that successfully executes against the Pegged Order submitted in the previous steps and confirm the trade is successful on the Post Trade Gateway

#	Test Step	Expected Result
1.	Submit an order that executes against the Pegged Order	Order successfully execute
2.	Record details of Trade Capture Report	Interface User ID (CompID) SecurityID ClientOrderID
		TradeID

4.6 T13 Trading – Pegged Limit Order (FIX or Native, FIX Drop Copy and FIX, Post Trade)

	•		
Test Case	Trading - Pegged Limit Order (FIX or Native, Drop Copy, Post Trade)	Mandatory	Self- Conformance / Supported Test
T13- 001 FIX or Native Gateway (Equity Market) Y Self- Confe		Self- Conformance	
Descr	iption:		
Succe	ssfully submit a Pegged Limit Order on the FIX or	Native & FIX	Trading Gateways
Comn	nent:		
In orde	er for the Pegged limit order to be successfully sub	omitted, MES is	s mandatory.
Activi	ty Steps		
#	Test Step	Expected Result	
1.	Enter a Pegged limit order during any of the below trading sessions:	The order is successfully submitted	
	 continuous trading 	Receive an E	Execution Report.
	opening auction		
	 volatility action call 		
	intra-day auction call		
	• FCO		
2.	Record the details of the order message sent	Interface Use	er ID (CompID)
	and the Execution Report in the Conformance Test Report	SecurityID	
	1 oot (topolt	OrderID	
		Oldonib	

Test Case ID:	Trading – Pegged Limit Orders	Mandatory	Self- Conformance / Supported Test
T13- 002	Drop Copy gateway (Equity Market)	Y	Self- Conformance

ClientOrderID

Description:

From the previous test case, log onto the Drop Copy gateway and confirm open orders exist specific to the Pegged Limit Order submitted

#	Test Step	Expected Result
1.	Log onto Drop Copy gateway	The order executes immediately.
	Request to view all open orders	Receive an Execution Report with no Open orders for instrument.
2.	Record the details of the order message sent and the Execution Report in the Conformance Test Report	Interface User ID (CompID) InstrumentID SecurityID

Test Case ID:	Trading – Pegged Limit Orders	Mandatory	Self- Conformance / Supported Test
T13- 003	Post Trade Gateway (Equity Market)	Υ	Self- Conformance

Submit an order that successfully executes against the Pegged Limit Order submitted in the previous steps and confirm the trade is successful on the Post Trade Gateway

#	Test Step	Expected Result
1.	Find successfully executed Pegged limit order matching with:	Receive an Execution report
		Interface User ID (CompID)
2	Record the details of the order message sent	ClientOrderID
2.	and the Trade Capture Report in the Conformance Test Report	SecurityID

4.7 T14 Trading – EOD Volume Auction Uncross (FIX or Native, FIX Drop Copy and FIX, Post Trade)

Test Case ID:	Trading – EOD Volume Auction Uncross (FIX or Native, Drop Copy, Post Trade)	Mandatory	Self- Conformance / Supported Test
T14- 001	FIX or Native Gateways (Equity Market)	Y	Self- Conformance

Description:

Successfully submit a Good for EOD Volume Auction Uncross (GDX) order onto the Native & FIX Trading Gateways

Comment:

Remain logged onto the FIX or Native Trading Gateways

#	Test Step	Expected Result
1.	 Enter a Good for Volume Auction uncross (GDX) TIF order during any of the below trading sessions: Continuous Trading Opening Auction Closing Auction Re-opening Auction / Volatility Auction Call / Intra-day Auction Call / FCO auction call/EOD Volume Auction Call Closing Price Publication CPX session 	The order is successfully submitted Receive an Execution Report.
2.	Record the details of the Execution Report in the Conformance Test Report	Interface User ID (CompID) ClientOrderID Instrument ID ExecutionID

Test Case ID:	Trading – EOD Volume Auction Uncross	Mandatory	Self- Conformance / Supported Test
T14- 002	Drop Copy Gateway (Equity Market)	Y	Self- Conformance

From the previous test case, log onto the Drop Copy Gateway and confirm open orders exist specific to the EOD Volume Auction call order submitted

Comment:

Logon to recovery mode and request to view all open orders

Activity Steps

#	Test Step	Expected Result
1.	In recovery mode on Drop Copy gateway Request to view all open orders	The order is successfully executed Receive an Execution Report
		with Open orders for instrument
		Interface User ID (CompID)
2.	Record the details of the order message sent and the Execution Report in the Conformance Test Report	ClientOrderID
۷.		InstrumentID
		ExecutionID

Test Case ID:	Trading – EOD Volume Auction Uncross Order	Mandatory	Self- Conformance / Supported Test
T14- 003	Post Trade Gateway (Equity Market)	Y	Self- Conformance

Description:

Confirm that the successfully executed EOD Volume Auction uncross order submitted in the previous step is successful on the Post Trade Gateway

#	Test Step	Expected Result
1.	Record the details of the order message sent and the Execution Report in the Conformance	Receive an Execution Report Match on:
	Test Report	Interface User ID (CompID)
		ClientOrderID
		Instrument ID
		ExecutionID

4.8 T15 Trading – Quotes

Test Case I	D: Trading – Quotes	Mandatory	Self-Conformance / Supported Test	
T15- 001	Native Enhanced Gateway (Derivatives Markets)	Y Self-Conformand		
Descri	ption:			
	sfully submit a dual-sided quote			
Comm	ent:			
Logon	to Native Enhanced Gateway and submit a dual-	sided quote		
Activit	Activity Steps			
#	Test Step	Expected Result		
1.	Submit a dual-sided quote	Receive an Execution Report for each side		
2.	Record the details of the quote message sent and the Execution Report in the Conformance	Receive an E Match on:	xecution Reports	
2.		Match on:	er ID (CompID)	
2.	and the Execution Report in the Conformance	Match on:	er ID (CompID)	
2.	and the Execution Report in the Conformance	Match on: Interface Use	er ID (CompID)	

4.9 T16 Trading – User Created Instruments

Test Case	Trading – User Created Instrument - D: Future	Mandatory	Self-Conformance / Supported Test		
T16- 001	Native Enhanced Gateway (Derivatives Markets)	Υ	Self-Conformance		
Client	Description: Client submits a request to create an instrument under the "Any day futures" strategy				
Comn Submi Gatew	Comment: Submit a request to create an Anyday Future instrument through the Native Enhanced Gateway. Activity Steps				
#	Test Step	Expected Re	sult		
1.	Submit a request a Security Definition Request message	Receive a Security Definition message back			
2.	Record the details of the Security Definition Request message sent and the Security Definition message in the Conformance Test Report	Interface User ID (CompID) Security Request ID Security Type Security ID			

Test Case ID:	Trading – User Created Instrument – Call Option	Mandatory	Self-Conformance / Supported Test
T16- 002	Native Enhanced Gateway (Derivatives Markets)	Y	Self-Conformance

Client submits a request to create an instrument under the "Call Option" strategy type.

Comment:

Submit a request to create a Call Option through the Native Enhanced Gateway.

Activity Steps

#	Test Step	Expected Result
1.	Submit a request a Security Definition Request message	Receive a Security Definition message back
2.	Record the details of the Security Definition Request message sent and the Security Definition message in the Conformance Test Report	Interface User ID (CompID) Security Request ID Security Type Security ID

Test Case ID:	Trading – User Created Instrument – Put Option	Mandatory	Self-Conformance / Supported Test
T16- 003	Native Enhanced Gateway (Derivatives Markets)	Y	Self-Conformance

Description:

Client submits a request to create an instrument under the "Put Option" strategy type.

Comment:

Submit a request to create a Put Option through the Native Enhanced Gateway.

#	Test Step	Expected Result
1.	Submit a request a Security Definition Request message	Receive a Security Definition message back
2.	Record the details of the Security Definition Request message sent and the Security Definition message in the Conformance Test Report	Interface User ID (CompID) Security Request ID Security Type Security ID

Test Case ID:	Trading – User Created Instrument – Naked Options	Mandatory	Self-Conformance / Supported Test
T16- 005	Native Enhanced Gateway (Derivatives Markets)	Y	Self-Conformance

Client submits a request to create an instrument under the "Naked Options" strategy type.

Comment:

Submit a request to create a Naked Option through the Native Enhanced Gateway.

Activity Steps

#	Test Step	Expected Result
1.	Submit a request a Security Definition Request message	Receive a Security Definition message back
2.	Record the details of the Security Definition Request message sent and the Security Definition message in the Conformance Test Report	Interface User ID (CompID) Security Request ID Security Type Security ID

Test Case ID:	Trading – User Created Instrument – Instrument ID	Mandatory	Self-Conformance / Supported Test
T16- 006	Native Enhanced Gateway (Derivatives Markets)	Y	Self-Conformance

Description:

Client submits a request to create an instrument using Instrument ID.

Comment:

Submit a request to create user-created instruments using the Instrument ID through the Native Enhanced Gateway. Field will indicate whether the Reference Instrument field is the Symbol or the Instrument ID.

#	Test Step	Expected Result
1.	Submit a Security Definition Request message	Receive a Security Definition message back
2.	Record the details of the Security Definition Request message sent and the Security Definition message received in the Conformance Test Report	Interface User ID (CompID) Security Request ID Security Type Reference Instrument Identifier
		Reference Instrument

4.10 T17 Trading – On-Book Strategies

Test Case ID:	Trading – On-Book Strategies – Trade on User Created Instrument - "Any day"	Mandatory	Self-Conformance / Supported Test
T17- 001	Native Enhanced Gateway (Derivatives Markets)	Y	Self-Conformance

Description:

Client executes an on-book trade against their "User Created Instrument" under the "Any day futures" strategy type

Comment:

Remain logged in from previous step. The test needs to be executed during the Continuous Trading session.

#	Test Step	Expected Result
1.	Enter an Order for the "User Created Instrument" created in Test Case T16 001	The order is successfully submitted and resides on the order book.
		Receive an Execution Report
2.	Record the details of the Order sent and	Interface User ID (CompID)
	Execution Report message in the Conformance Test Report	Client Order ID
		Security ID
		Security Type
		Execution ID

Test Case ID:	Trading – On-Book Strategies – Trade on "User Created Instrument" - "Call Delta Options"	Mandatory	Self-Conformance / Supported Test
T17- 002	Native Enhanced Gateway (Derivatives Markets)	Y	Self-Conformance

Client executes an on-book trade against their "User Created Instrument" under the "Call Delta Options" strategy type

Comment:

Remain logged in from previous step. The test needs to be executed during the Continuous Trading session.

#	Test Step	Expected Result
1.	Enter an Order for the "User Created Instrument" created in Test Case T16 002	The order is successfully submitted and resides on the order book.
		Receive an Execution Report
2.	Record the details of the Order sent and	Interface User ID (CompID)
	Execution Report message in the Conformance Test Report	Client Order ID
		Security ID
		Security Type
		Execution ID

Test Case ID:	Trading – On-Book Strategies – Trade on "User Created Instrument" - "Put Delta Options"	Mandatory	Self-Conformance / Supported Test
T17- 003	Native Enhanced Gateway (Derivatives Markets)	Y	Self-Conformance

Client executes an on-book trade against their "User Created Instrument" under the "Put Delta Options" strategy type

Comment:

Remain logged in from previous step. The test needs to be executed during the Continuous Trading session.

#	Test Step	Expected Result
1.	Enter an Order for the "User Created Instrument" created in Test Case T16 003	The order is successfully submitted and resides on the order book.
		Receive an Execution Report
2.	Record the details of the Order sent and	Interface User ID (CompID)
	Execution Report message in the Conformance Test Report	Client Order ID
		Security ID
		Security Type
		Execution ID

Test Case ID:	Trading – On-Book Strategies – Trade on "User Created Instrument" - "Naked Options"	Mandatory	Self-Conformance / Supported Test
T17- 004	Native Enhanced Gateway (Derivatives Markets)	Y	Self-Conformance

Client executes an on-book trade against their "User Created Instrument" under the "Naked Options" strategy type

Comment:

Remain logged in from previous step. The test needs to be executed during the Continuous Trading session.

Activity Steps

#	Test Step	Expected Result
1.	Enter an Order for the "User Created Instrument" created in Test Case T16 005	The order is successfully submitted and resides on the order book.
		Receive an Execution Report
2.	Record the details of the Order sent and	Interface User ID (CompID)
	Execution Report message in the Conformance Test Report	Client Order ID
		Security ID
		Security Type
		Execution ID

4.11 T18 Trading - Off-Book Strategies

Test Case ID:	Trading – Off-Book Strategies – Single/Dual sided trade - "Delta Option"	Mandatory	Self-Conformance / Supported Test
T18- 001	FIX Post Trade Gateways (Derivatives Markets)	Y	Self-Conformance

Description:

Client performs a single/dual sided OFF BOOK trade under the Delta Option strategy type

Comment:

You will already be connected from the previous test step. Submit a single/dual sided trade report. Use your "User Created" instrument created in Test Case T16 002/003.

#	Test Step	Expected Result
1.	Submit an Off Book single/dual sided Trade Report	The Report successfully submitted.
		Receive a Trade Capture Report (TCR) Ack and Trade Capture Report (TCR).
2.	Record the details of the Trade Report in the Conformance Test Report	Interface User ID (CompID) Trade Report ID
		Trade ID

Test Case ID:	Trading – Off-Book Strategies – Single/Dual sided trade - "Inverse Calendar Spread"	Mandatory	Self-Conformance / Supported Test
T18- 002	FIX Post Trade Gateways (Derivatives Markets)	Y	Self-Conformance

Client performs a single/dual sided OFF BOOK trade under the Inverse Calendar Spread strategy type

Comment:

You will already be connected from the previous test step. Submit a single/dual sided trade report. Use your "User Created" instrument created in scenario Test Case T16 005.

Activity Steps

#	Test Step	Expected Result
1.	Submit an Off Book single/dual sided Trade Report	The Report successfully submitted.
		Receive a Trade Capture Report (TCR) Ack and Trade Capture Report (TCR).
2.	Record the details of the Trade Report in the Conformance Test Report	Interface User ID (CompID) Trade Report ID Trade ID

Test Case ID:	Trading – Off-Book Strategies – Single sided strategy type trade	Mandatory	Self-Conformance / Supported Test
T18- 003	FIX Post Trade Gateways (Derivatives Markets)	Y	Self-Conformance

Description:

Perform a single sided Off Book strategy trade type

Comment:

Stay connected from the previous test step. Submit a single sided strategy type trade report.

#	Test Step	Expected Result
1.	Submit an Off Book single sided strategy Trade Report	The Report successfully submitted.
		Receive a Trade Capture Report (TCR) Ack and Trade Capture Report (TCR).
2.	Record the details of the Trade Report in the Conformance Test Report	Interface User ID (CompID) Trade Report ID
		Trade ID

Test Case ID:	Trading – Off-Book Strategies – Single/Dual sided trade - "FwdFwd"	Mandatory	Self-Conformance / Supported Test
T18- 004	FIX Post Trade Gateways (Derivatives Markets)	Y	Self-Conformance

Client performs a single/dual sided Off Book trade against their "User Created Instrument", created under the FwdFwd strategy type

Comment:

Stay connected from the previous test step. Submit a single sided strategy type trade report. Use your "User Created" instrument created in Test Case T16 004.

Activity Steps

#	Test Step	Expected Result
1.	Submit an Off Book single sided strategy Trade Report	The Report successfully submitted.
		Receive a Trade Capture Report (TCR) Ack and Trade Capture Report (TCR).
2.	Record the details of the Trade Report in the Conformance Test Report	Interface User ID (CompID) Trade Report ID Trade ID

Test Case ID:	Trading – Off-Book Strategies – Roll Trade	Mandatory	Self-Conformance / Supported Test
T18- 005	FIX Post Trade Gateways (Derivatives Markets)	Y	Self-Conformance

Description:

Client performs an OFF BOOK Roll Trade

Comment:

You will already be connected from the previous test step. Perform roll trade strategy type trade report.

#	Test Step	Expected Result
1.	Submit an Off Book Roll Trade (RT) strategy trade type Trade Report	The Report successfully submitted.
		Receive a Trade Capture Report (TCR) Ack and Trade Capture Report (TCR).
2.	Record the details of the Trade Report in the Conformance Test Report	Interface User ID (CompID) Trade Report ID
		Trade ID

4.12 T19 Trading – Inverse Calendar Spreads

Test Case ID:	Trading – On-Book Strategies – Implied Orders	Mandatory	Self-Conformance / Supported Test
T19- 001	Native Enhanced Gateway (Derivatives Markets)	Υ	Self-Conformance
Description:			
Execute a t	Execute a trade on an inverse calendar spread instrument		
Comment:			
Stay connected from the previous test step. Execute a trade on an inverse calendar instrument.			

ACTIVI	ity Steps		
#	Test Step	Expected Result	
1.	Enter an Order for an inverse calendar instrument	The order is successfully submitted and resides on the order book.	
		Receive an Execution Report	
2.	Record the details of the Order sent	Interface User ID (CompID)	
		Client Order ID	
		Security ID	
		Security Type	
3.	Enter an Order that matches the order submitted in step 1	The Order is successfully submitted and executes against the order from step 1.	
4.	Record the details of the Execution Reports in	Interface User ID (CompID)	
	the Conformance Test Report	Execution IDs	

4.16 T20 Trading - Iceberg Order (Native or FIX)

Test Case ID:	Trading – Iceberg Order (FIX or Native)	Mandatory	Self- Conformance / Supported Test
T20 - 001	FIX or Native Gateway (Equity Market)	Y	Self- Conformance
Description:			

Description:

Successfully submit an Iceberg Order on the FIX or Native Trading Gateways

Comment:

In order for the Iceberg Order to be successfully submitted, the visible and total size is mandatory.

#	Test Step	Expected Result
1.	Enter an Iceberg Order during continuous trading	The order is successfully submitted and resides on the order book. Receive an Execution Report.
		·
2.	and the Execution Report in the Conformance	Client Order ID
		Execution Type
		Order Status
		DisplayQty
		OrderQty
		Interface User ID (CompID)

Test Case ID:	Trading – Trade against the submitted lceberg Order	Mandatory	Self- Conformance / Supported Test
T20 - 002	FIX or Native Gateway (Equity Market)	Y	Self- Conformance

Trade against an Iceberg Order

Comment:

Remain logged in from the previous step. Ensure that the Iceberg Order has met the required validations, based on the previous test. The test needs to be executed during the Continuous Trading session.

#	Test Step	Expected Result
1.	Submit an Order to trade against the visible and hidden portion of the passive Iceberg order. Assume there is a match for this order in the order book.	The order will execute immediately upon successful match to fill both the visible size and the hidden size for of the passive order.
2.	Record the details of the order message sent	Interface User ID (CompID)
	and the Execution Report in the Conformance Test Report	Order ID
	·	Client Order ID
		Public Order ID
		Execution Type
		Order Status
3.	Record the details of the order message sent	Interface User ID (CompID)
	and the Execution Report in the Conformance Test Report for an Order that was partially	Order ID
	filled.	Client Order ID
		Public Order ID
		Execution Type
		Order Status
4.	Locate the replenished Iceberg Order on the MITCH Market Data Gateway and record the Order ID in the Conformance Test Report.	Order ID

Test Case ID:	Gateway Description	Mandatory	Self-Conformance / Supported Test
T20- 003	Native Basic Trading Gateway – Icebergs (Equity Markets)	N	Self-Conformance

The new field will be populated only for Iceberg executions for on book trades on Equity instruments

Comment:

From T1-002 logon has been established (Login with version 2)

#	Test Step	Expected Result
1.	Logon to Drop Copy and Post Trade Gateway	Logon successful
2.	Submit an Iceberg order	Iceberg order submitted
3.	Execute against the resting iceberg order for both the visible and hidden quantities	Trade executed successfully
4.	Record the details of the trade messages sent in the Conformance Test Report	Receive Execution report on FIX Trading Gateway; Native Trading Gateway; Drop Copy Gateway;
		Receive Trade Capture Report on Post Trade Gateway
		Logoff successfully

4.17 T21 Trading - Liquidity Indicator (Native or FIX)

Test Case ID:	Trading – Liquidity Indicator (FIX or Native, FIX Drop Copy)	Mandatory	Self- Conformance / Supported Test
T21 - 001	FIX or Native Gateway (Equity Market)	Y	Self- Conformance

Description:

Successfully submit an order, as a result of a client providing liquidity or taking liquidity on the FIX or Native Trading Gateways

Comment:

Indicator to identify whether the order fill or partial fill was the liquidity provider or taker to an execution. Required if Order Status is Partially Filled or Filled and Execution Type is Trade. The test needs to be executed during Continuous Trading session.

#	Test Step	Expected Result
1.	Enter an order during continuous trading resulting in an order status of partially filled or filled and execution type of trade	Receive an Execution Report.
2.	Record the details of the order message sent	Client Order ID
	and the Execution Report received in the Conformance Test Report.	Execution Type
		Order Status
		Interface User ID (CompID)
		Liquidity Indicator

4.18 T22 Trading - Working Indicator (Native)

Test Case ID:	Trading – Working Indicator (Native)	Mandatory	Self- Conformance / Supported Test
T22 - 001	Native Gateway	V	Self-
122 - 001	(Equity Market)	I	Conformance

Description:

Successfully submit a new order to identify if the order is currently being worked on Native Trading Gateway

Comment:

Indicator to identify whether the order is currently being worked. Only applicable when Order Status is New.

#	Test Step	Expected Result
1.	Enter an order during continuous trading where the order status is new.	Check presence of field Receive an Execution Report.
2.	Record the details of the order message sent and the Execution Report in the Conformance Test Report.	Client Order ID Execution Type Order Status Interface User ID (CompID) Working Indicator

4.19 T23 Trading – Real Time Circuit Breaker Alerts to Brokers (Drop Copy)

Test Case	Trading – Real Time Circuit Breaker Alerts to Brokers (Drop Copy)	Mandatory	Self- Conformance / Supported Test
T23- 001	Drop Copy Gateway (Equity Market)	N	Self- Conformance
Descr	iption:		
Trigge	r alert sent to Drop Copy user when trader breach	nes a circuit bre	eaker
Comn	nent:		
Receiv	ve alerts also for any missed circuit breaker upon	login	
Activi	Activity Steps		
#	Test Step	Expected Result	
1.	Log onto Drop Copy Gateway	Logon successful	
2.	Enter an order that triggers a circuit breaker	Circuit breaker triggered and 'News' message received	
		Text	
	Record the details of the News message	SecurityID	
3.	received in the Conformance Test Report	NoRoutingIDs	
		RoutingType	
		RoutingID	

4.20 T24 Trading - FX Auction Automation

NOTE: This section must be actioned only on the Native Heavy Trading interfaces where applicable. This functionality is only applicable to firms that are listed as Banks.

Test Case II	O: Gateway description	Mandatory	Self-Conformance / Supported Test	
T24- 001	Native Heavy Trading Gateway – FX Auction Automation (Currency Market Instruments)	N	Self-Conformance	
Descri	ption:			
Submit	an order to the FX Auction order book			
Comment:				
	This will only be allowed if the firm is listed as a Bank. Identify an instrument that has the FX Auction Order book attached.			
Activity Steps				
#	Test Step	Expected Result		
1.	Logon to Native Heavy Gateway	Logon successful.		

11	1 Cot Otop	Expedica result
1.	Logon to Native Heavy Gateway	Logon successful.
2.	Submit an order to the FX auction	Order received
3.	Record the details of the trade messages sent in the Conformance Test Report	Receive Execution reports on the Native Heavy Gateway; Drop Copy gateway.

Test Case ID:	Gateway description	Mandatory	Self-Conformance / Supported Test
T24- 002	FX Auction Automation (Currency Market Instruments)	N	Self-Conformance

Description:

Ability to amend an existing order in the FX Auction

Comment:

From T24-001 an order already exists in the FX Auction order book. This will only be allowed if the firm is listed as a Bank. Identify an instrument that has the FX Auction Order book attached.

#	Test Step	Expected Result
1.	Logon to Native Heavy Gateway	Logon successful.
2.	Submit an order to the FX auction	Order received
3.	Amend order	Order amended successfully
4.	Record the details of the trade messages sent in the Conformance Test Report	Receive Execution reports on the Native Heavy Gateway; Drop Copy gateway.

Test Case ID:	Gateway description	Mandatory	Self-Conformance / Supported Test
T24- 003	FX Auction Automation (Currency Market Instruments)	N	Self-Conformance

Ability to cancel an order in the FX Auction

Comment:

From T24-002 an order already exists in the FX Auction order book. This will only be allowed if the firm is listed as a Bank. Identify an instrument that has the FX Auction Order book attached.

Activity Steps

#	Test Step	Expected Result
1.	Logon to Native Heavy Gateway	Logon successful.
2.	Submit an order to the FX auction	Order received
3.	Cancel order	Order cancelled successfully Receive Execution reports on the Native Heavy Gateway

Test Case ID:	Gateway description	Mandatory	Self-Conformance / Supported Test
T24- 004	FX Auction Automation (Currency Market Instruments)	N	Supported test

Description:

Ability to execute an order in the FX Auction

Comment:

This will only be allowed if the firm is listed as a Bank. Identify an instrument that has the FX Auction Order book attached.

#	Test Step	Expected Result
1.	Logon to Native Heavy Gateway, Post Trade Gateway and Drop Copy gateway	Logon successful.
2.	Submit orders to the FX auction	Order submited
2.1	Submit 2 buy orders (At least 10 is size)	Order received
2.2	Submit 1 sell order (At least 15 in size)	Order received
3.	Execute in the auction (Contact CSC at this point)	Trade executed successfully
4	Record the details of the trade messages sent in the Conformance Test Report	Receive Execution reports on the Native Heavy Gateway; Drop Copy Gateway.
		Receive Trade Capture report on the Post Trade Gateway;
		Receive Trade and Extended stats message on the MITCH market data gateway

4.21 T25 Trading - Closing Price Cross (FIX and Native)

Test Case	ID: Native Trading Gateway	Mandatory	Self-Conformance / Supported Test
T25- 001	Native Trading - Self - Match Prevention Closing Price Cross Limit Orders (Equity Market)	N	Self-Conformance
Descr	iption:		
Valida Gatev	tte Aggressive Limit Orders that are Prevented fro	om Self-Match	ing - Native Trading
Comn			
	e login to the Basic Native Trading Gateway using executed during the Closing Price Cross (CPX) se		on 3. The test needs
Activit	y Steps		
<u>#</u>	<u>Test Step</u>	Expected Re	<u>sult</u>
1.	Enter a Limit order (DAY) into the order book with a specific unique id.	Receive an containing Prevention K	
	Allowed TIF's: DAY, IOC, FOK, GTC, GTT, GFX, GTD CPX, AND GDX		
	Not allowed for: OPG, GFA, ATC		
<u>2.</u>	Enter an aggressive Limit order (DAY) with the same unique id that will potentially match the with resting order. The aggressive order will remain on the order book.	Receive an with status of	Execution Report of Expiry containing e Prevention Key of
<u>3.</u>	Record the details of the order message sent and the Execution Report in the Conformance Test Report	Order ID Client Order Execution ID	

Test Case ID:	FIX Trading Gateway	Mandatory	Self-Conformance / Supported Test
<u>T25-</u> <u>002</u>	FIX Trading - Self - Match Prevention Closing Price Cross Limit Orders (Equity Market)	<u>N</u>	Self-Conformance

Validate Aggressive Limit Orders that are Prevented from Self-Matching.

Comment:

Ensure login to the FIX Trading Gateway using protocol version 3. The test needs to be executed during the Closing Price Cross session.

<u>#</u>	Test Step	Expected Result
1.	Enter a Limit order (DAY) into the order book with a specific unique id.	Receive an Execution Report containing the NoTrdKey (7714) field.
	Allowed TIF's: DAY, IOC, FOK, GTC, GTT, GFX, GTD CPX, AND GDX	
<u>2.</u>	Not allowed for: OPG, GFA, ATC Enter an aggressive Limit order (DAY) with the same unique id that will potentially match with the resting order. The aggressive order will remain on the order book.	The resting order will be expired. Receive an Execution Report with status of Expiry containing the NoTrdKey (7714) field of the orders.
3.	Record the details of the order message sent and the Execution Report in the Conformance Test Report	Interface User ID (CompID) Order ID Client Order ID Execution ID NoTrdKey (7714)

4.22 G1 Error Handling

Test Case ID:	All Gateways	Mandatory	Self-Conformance / Supported Test
G1-001	Logon after Suspension / Un-suspension	Y	Supported Test

Description:

Verify Logon after suspension or un-suspension of Interface User ID. Call Customer Support to book time for executing this test with a CTA.

Comment:

This test case must be repeated for every interface / service that the client subscribes to I.e. Repeat per Interface / Service that the client subscribes to: disconnect from connection

- Trading Interfaces
 - Native Trading Gateway
 - o Native Enhanced Trading Gateway
 - Native Recovery Gateway
 - Fix Trading Gateway
 - Post Trade Gateway
 - Drop Copy Gateway
- Information Interfaces
 - o FIX/FAST Replay Service (any channel)
 - o FIX/FAST Recovery Service (any channel)
 - MITCH Replay Service
 - MITCH
 - o Recovery Service

When executing this test case for the Information Services, please **choose any one channel** to connect to and provide details in the comments section of the Conformance Test Report

#	Test Step	Expected Result
1.	Remain logged in to all interfaces/services where applicable	Interface User ID (CompID) suspended
	Request CTA to suspend Interface User ID (CompID)	
2.	Establish a connection and Logon to the applicable Gateway(s).	Logon(s) rejected.
3.	Record the details of the Logon failure in the	Interface User ID (CompID)
	Conformance Test Report	Error Response received
4.	Terminate all client connections.	Interface User ID (CompID) un-
	Request CTA to un-suspend Interface User ID (CompID)	suspended
5.	Establish a connection and Logon to the applicable Gateway(s).	Logon(s) successful.
6.	Record the details of the Logon success Conformance Test Report	Interface User ID (CompID)

4.23 G2 FIX Session Handling

Test Case ID:	FIX Gateways – Trading interfaces	Mandatory	Self-Conformance / Supported Test
G2-001	Heartbeats during inactivity	Y	Supported Test

Description:

Verify the exchange of heartbeats between the client and server during periods of inactivity. Call Customer Support to book time for executing this test with a CTA.

Comment:

This test case is applicable if it can be supported by a client. I.e. the client is able to disable client initiated messages. This test is mandatory unless agreed with the JSE. Please choose any one channel from the below list to connect to and provide details in the comments section of the Conformance Test Report.

- Trading Interfaces
 - o Fix Trading Gateway
 - Post Trade Gateway
 - Drop Copy Gateway

#	Test Step	Expected Result
1.	Establish a connection and Logon to the applicable Gateway.	Successful Logon.
2.	Stays inactive i.e. make sure that there are no client initiated messages sent to the server.	No client initiated messages sent to the server.
	Make sure there are no unexpected	Server sending Heartbeat messages to the client.
	disconnects within a reasonable timeframe (a few minutes)	Client is responding to Heartbeat messages sent by the server.
3.	Record the test start time and whether any	Gateway
	disconnects occurred in the Conformance Test Report	Test Start Time
	·	Test End Time
		Interface User ID (CompID)

Test Case ID:	FIX Gateways – Trading interfaces	Mandatory	Self-Conformance / Supported Test
G2-002	Client Resend Request	Υ	Supported Test

Validate Client Resend Request.

Call Customer Support to book time for executing this test with a CTA.

Comment:

This test is mandatory unless agreed with the JSE. Please choose any one channel from the list below to connect to and provide details in the comments section of the Conformance Test Report.

- Trading Interfaces
 - Fix Trading Gateway
 - Post Trade Gateway
 - o Drop Copy Gateway

#	Test Step	Expected Result
1.	Establish a connection and Logon to the applicable Gateway.	Successful Logon.
2.	Submit an Order and disconnect immediately	Order successfully submitted and has a valid order status.
	The order will need to be an order that will not execute immediately in order to give you time to logoff and miss messages.	Server is sending Execution Report back to the client however the client is disconnected.
3.	Reconnect and Logon.	Successful Logon.
	Send a Resend Request message MsgType=2 with tags BeginSeqNo and EndSeqNo set to the sequence number of the Execution Report received while executing step 2 above.	Server resends Execution Report back to the client.
3.	Record the test details in the Conformance	Gateway
	Test Report	Test Start Time
		Test End Time
		Interface User ID (CompID)
		Execution ID
		Order ID

4.24 Optional Test Cases

NOTE: This section must be repeated for FIX Trading/Native Trading and Native Enhanced Trading interfaces where applicable.

Test Case ID:	Trading Gateway – Trading interfaces	Mandatory	Self-Conformance / Supported Test
OT1-001	Order Cancellation from different ComplDs	Υ	Self-Conformance

Description:

Verify the cancellation of an Order from a CompID different to the one in the original Order Entry message.

Comment:

Remain logged in. The test needs to be executed during the Continuous Trading session.

#	Test Step	Expected Result
1.	Enter an Order through a specific CompID.	The order is successfully submitted and resides on the order book.
	Assume there is no matching order for this order in the order book.	Receive an Execution Report.
2.	Cancel the Order through a different CompID to step 1.	The order is successfully cancelled.
		Receive an Execution Report.
3.	Record the details of the order messages sent	Interface User IDs (CompIDs)
I I	and the Execution Report in the Conformance Test Report	Order IDs
		Client Order IDs
		Execution IDs

Test Case ID:	Post Trade Gateway	Mandatory	Self-Conformance / Supported Test
OT1-002	Post Trade – Trade Cancellation	Y	Self-Conformance

Cancellation of a same day On Book Trade from a different CompID.

Comment:

Remain logged in. The test needs to be executed during the Continuous Trading session. **Cancel an On Book trade** executed on the same day.

#	Test Step	Expected Result
1.	Enter an Order through a specific CompID that matches with another order from the same CompID.	Orders are matched and Trade Capture Report (TCR) is received
2.	Submit a Trade Capture Report to cancel a same day On Book trade from a different CompID.	Trade Report cancellation successfully submitted. Receive a Trade Capture Report (TCR) Ack and Trade Capture Report (TCR).
3.	Record the details of the same day On Book cancellation Trade Capture Report in the Conformance Test Report.	Interface User IDs (CompIDs) Trade IDs Trade Report IDs OrigTradeID OrigTradeDate