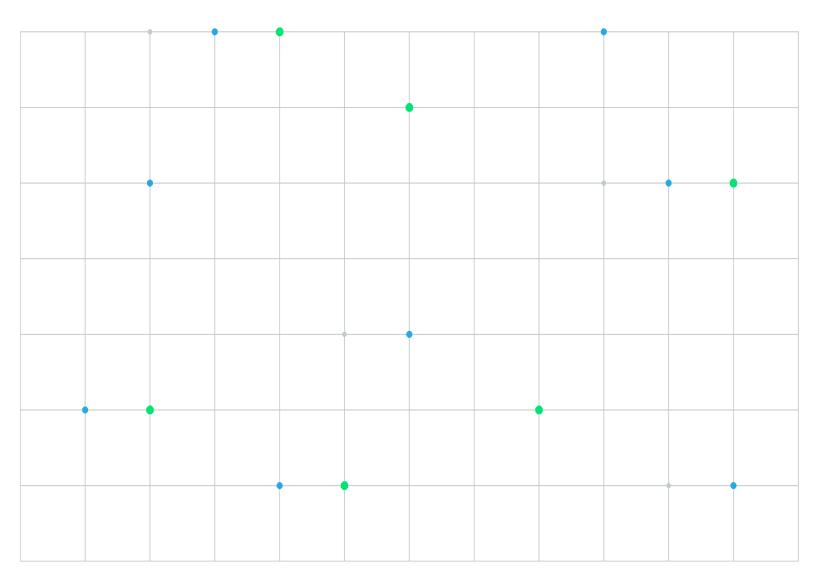


AutoCert+ CME FX Spot+ User Manual

9 December 2024



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Getting Started

The AutoCert+ tool is an automated testing tool for validating application functionality. It provides a web interface for using CME Group certification scenarios.

To facilitate the process of connecting a customer application to CME Globex, CME Group provides a dedicated certification environment to allow customers to test their systems before they complete certification.

This user manual accompanies the AutoCert+ CME FX Spot+ test suite for certifying your application. For CME customers who want to trade FX Spot+ EBS products, iLink 3 certification via AutoCert+ is required. MDP 3.0 certification is not required, however, CME Group strongly recommends that client systems test FX Spot+ products in the New Release environment before the production launch.

For CME customers who want to trade <u>FX Spot+ Futures</u> products, MDP 3.0 certification via AutoCert+ is required for their client systems. Certification for iLink 3 via AutoCert+ is not required, however, CME Group strongly recommends that futures client systems test FX Spot+ trading in notional quantity.

Accessing and Navigating AutoCert+

▶ To access and navigate AutoCert+:

- 1. Log into the automated certification tool.
- 2. Review general AutoCert+ test suite navigation and general interview information.
- 3. To access the AutoCert+ CME FX Spot+ test suite, select the following settings on the Current Testing Configuration screen.
 - a. Company Name: Select a company profile.
 - b. Market: Select either "EBS" or "Futures & Options" based on the instrument books you are testing.
 - c. Purpose: Select either "Order Entry" (EBS) or "Market Data" (Futures & Options).
 - d. Application System: Select a test system.
 - e. Test Suite: For EBS, select "EBS Order Entry for FX Spot Plus". For futures and options, select "F&O MDP for FX Spot Plus".
 - f. Identifier: Select a Sendercomp identifier and click Assign. For EBS, only iLink 3 Convenience Gateway (CGW) sessions are supported for trading CME FX Spot Plus.

		Current Testing C	Configuration		
Tester: Company Name: Market: Purpose: Application System: Test Suite: NOTE: Thi	CA V EBS V Coder Entry EBS Order Entry for FX Spot Plus sets suite utilizes the NEWRELEASE ent	vironment.	Type: Category: 1603: 1604: 1605:	Automated Tradin ISV System 1 BES	
Sendercomp:	8DL12JA UNASSIGN		Test Suite Pre-Certific Test Suite	cation Interview:	Not Complete Not Tested

- 4. Complete the Interview for this test suite.
- 5. Complete the applicable test suite: EBS Order Entry for FX Spot Plus or F&O MDP for FX Spot Plus.
- 6. Complete the certification process from the **Post Certification** tab.

What's New

The following table shows the updates made to the AutoCert+ CME FX Spot+ Help system.

Date	Topic(s)	Description
9 Dec 2024	FX Spot Plus Statistics Messages	Removed trade cancel step from test. Trade bust not supported on FX Spot+ instruments.
11 Nov 2024	All	Initial release

Interview

The interview consists of a series of questions about your trading application. Based on your responses, certain questions and tests are required and others are optional. You must complete the pre-certification interview before running the test suite.

To complete the interview:

- 1. Select the Interview tab.
- 2. Answer each question and select the **Complete** button.

For the **EBS Order Entry for FX Spot Plus** test suite, answer the following questions:

Interview	Test Suite Test Case Post Certification Help
	How does your application register Administrative Information ? (check all that apply)
~	Pre-Registration(Service Gateway)
	On-Demand
	Which order types will your system support ?
~	Limit order
~	Market limit order
✓	Market order with protection
2	Stop limit order
2	Stop order with protection
	Will your system support GFS(Day) Order ? (NOTE: Behave like Day order expiring daily after the market closed)
0	Yes No
<u> </u>	
	Will your system support GTC(Good Till Cancel) Order ? Yes
8	Tes No
<u> </u>	Will your system support GTD(Good Till Date) Order ?
	Will your system support or folloodul fill bate) order ? Yes
õ	No
<u> </u>	Will your system support FOK(Fill Or Kill) Order ? (NOTE: Tag 59-TimeInForce = 3 with tag 110-MinQty = tag 38-OrderQty)
	Ying your system support Forcem or King order 2 (no fill, lag servicement-order a with lag trowning y and any service exp
õ	No
-	Will your system support Self Match Prevention ?
•	Yes
0	No
	Does your system support Order Status functionality ?
۲	Yes
0	No
	Does your system support Mass Order Status functionality ?
۲	Yes
0	No
	Which Mass Order Status Functionality does your system support ?
	Market Segment Instrument Group
	Instrument Group
	Insulation All Orders
-	
	Cancel on Conclusion will NOT cancel GFS Order on FX Spot Plus instrument. Cancel on Disconnect will NOT chancel GTC and GTD orders. Acknowledge
8	Acknowledge Not Acknowledge
<u> </u>	GTC and GTD Orders beginning of Week processing will be tested for On-Demand Format during certification. If you are supporting Pre-Registered
	G IC and GTD orders beginning or week processing will be tested for On-Demand Format during certification. If you are supporting Pre-Registered Format, please test outside AutoCert in New Release test environment.
	Acknowledge
õ	Not Acknowledge
0	
Com	

For the F&O MDP for FX Spot Plus test suite, answer the following questions:

Interview	Test Suite Test Case Post Certification Help
	Which of the following connection type does your application use ?
۲	CME SBE UDP Multicast
0	CME Smart Stream on GCP SBE
	Which of the following ones does your application support ?
~	Market by Price
✓	Market by Order
	Does your system support implied markets ?
0	Yes
۲	No
Com	plete

After completing the interview, select the **Test Suite** tab for **EBS Order Entry for FX Spot Plus** or **F&O MDP for FX Spot Plus**.

EBS Order Entry for FX Spot Plus Certifcation

Use the **Test Suite** tab to run the **EBS Order Entry for FX Spot Plus** certification test cases required to certify your application. You are required to select and run each test in the test suite. Test cases are available based on your Interview responses.

Current Testing (Configurati	ion			
Tester: OA V Company Name: EBS V Market: EES V Purpose: Order Entry V Application System: V V Test Suite: ES Sorder Entry for FX Spot Plus V NOTE: This test suite utilizes the NEWRELEASE environment.	Ca 16	stegory: IS	domated Trading V System 3S	ı System	
Sendercomp: 1DA11VA UNASSIGN	Pro	st Suite Sta e-Certificationst Suite Stat	on Interview:	Complete Not Tested	
Interview Test Suite Test Case Post Certification Help					
EBS Order Entry for FX Spot Plus Certification Tests	Retest	Flag	Status	Mandatory/Optiona	Executed By
EX Soot Plus Pre-registration of required party details in Service Gateway for Pre- Registered Format			Not Tested	Mandatory	Not Available
EX Soot Plus On-demand required party details for On-demand Format			Not Tested	Mandatory	Not Available
EX Soot Plus GES(Day) Limit Order Test for Pre-Registered Format.			Not Tested	Mandatory	Not Available
EX Soot Plus GFS(Day) Limit Order Test for On-demand Format			Not Tested	Mandatory	Not Available
FX Soot Plus GTC(Good Till Cancel) Order Test for Pre-Registered Format			Not Tested	Mandatory	Not Available
FX Spot Plus GTC(Good Till Cancel) Order Test for On-demand Format			Not Tested	Mandatory	Not Available
FX Soot Plus GTD(Good Till Date) Order Test Pre-Registered Format			Not Tested	Mandatory	Not Available
			Not Tested	Mandatory	Not Available
EX Spot Plus GTD(Good Till Date) Order Test On-demand Format					100111010000
EX Soot Plus FOK/Fill Or Kill) Order Test for Pre-Registered Format			Not Tested	Mandatory	Not Available
EX Soot Plus FOK/Fill Or Kill) Order Test for On-demand Format.			Not Tested	Mandatory	Not Available
EX Soot Plus Market-Limit Order Test for Pre-Registered Format			Not Tested	Mandatory	Not Available
EX Soot Plus Market-Limit Order Test for On-demand Format			Not Tested	Mandatory	Not Available
FX Soot Plus Market Order Test for Pre-Registered Format			Not Tested	Mandatory	Not Available
EX Soot Plus Market Order Test for On-demand Format			Not Tested	Mandatory	Not Available
EX Soot Plus Stop Limit Order Test for Pre-Registered Format			Not Tested	Mandatory	Not Available
EX Soot Plus Stop Limit Order Test for On-demand Format		- 0	Not Tested	Mandatory	Not Available
EX Soot Plus Stop Order Test for Pre-Registered Format			Not Tested	Mandatory	Not Available
EX Spot Plus Stop Order Test for On-demand Format			Not Tested	Mandatory	Not Available
EX.Soot Plus Self match prevention with Pre-registered administrative SelfMatchPreventionInstruction.			Not Tested	Mandatory	Not Available
EX Spot Plus Self match prevention with On-demand administrative SelfMatchPreventionInstruction.			Not Tested	Mandatory	Not Available
FX Soot Plus Beginning of Week Connection with GT Orders for On-Demand Format			Not Tested	Mandatory	Not Available
ILink Order Status Request for Pre-Registered Format			Not Tested	Mandatory	Not Available
Link Order Status Request for On-demand Format			Not Tested	Mandatory	Not Available
Link Order Mass Status Request for all working orders for an instrument group for Pre- Registered Format			Not Tested	Mandatory	Not Available
Link Order Mass Status Request for all working orders for an instrument group for On- Demand Format.			Not Tested	Mandatory	Not Available
Link Order Mass Status Request for all working orders for an instrument for Pre- Registered Format			Not Tested	Mandatory	Not Available
Link Order Mass Status Request for all working orders for an instrument for On- Demand Format.			Not Tested	Mandatory	Not Available
Support MOSR functionality for a particular market segment for Pre-Registered Format			Not Tested	Mandatory	Not Available
Support MOSR functionality for a particular market segment for On-Demand Format			Not Tested	Mandatory	Not Available
Link Order Mass Status Request for all working orders for Pre-Registered Format			Not Tested	Mandatory	Not Available
Link Order Mass Status Request for all working orders for On-Demand Format			Not Tested	Mandatory	Not Available
REFRESH			Key: 🍈	not tested . Complete	pending • failed

FX Spot Plus Pre-registration of required party details in Service Gateway for Pre-Registered Format

The purpose of this test is to verify that the client system can submit an order with the required party details for trading FX Spot Plus.

This test case is mandatory if you selected **Pre-Registration** (Service Gateway) in the interview question **How does your application register Administrative Information**?

- 1. On the Test Case tab, use the Instrument(s) drop down menu to choose an instrument and channel and click SELECT.
- 2. Select START TEST.
- 3. Submit a Party Details Definition Request (35=CX) message with the required party details to the Service Gateway for trading FX Spot Plus.
- 4. Select **Yes** or **No** to indicate whether your system received and processed the <u>Party Details Definition Request Acknow-</u>ledgment (35=CY).
- 5. Over an iLink connection, submit an order for the FX Spot Plus instrument with the Party Details registered in Step 3.
- Select Yes or No to indicate whether your system received and processed the Execution Report New Order (35=8,3-39=0) message.

Regi	stered Format		for Pre-
This te	It could take up to several minutes. Please do not close the window during the test. Closing window/stopping test requires to n	run the	test from step
Purp			
The	urpose of this test is to verify that the client system can submit an order with the required party details for trading FX Spot Plus		
Selec	ted instrument(s): Unlock		
agair	If you are currently running this test.	_	TART TEST
			t Not Runnin
Desc	ription	Tes Flag	t Not Runnin Status
Desc 1	ription Submit a Party Details Definition Request(35=CX) message with the required party details to Service Gateway for trading FX Spot Plus.		
	Submit a Party Details Definition Request(35=CX) message with the required party details to Service Gateway		Status Not Teste
1	Submit a Party Details Definition Request(35=CX) message with the required party details to Service Gateway for trading FX Spot Plus.		Status

FX Spot Plus On-demand required party details for On-demand Format

The purpose of this test is to verify that the client system can submit an order with the required party details for trading FX Spot Plus.

This test case is mandatory if you selected **On-Demand** in the interview question **How does your application register Administrative Information?**

- 1. On the Test Case tab, use the Instrument(s) drop down menu to choose an instrument and channel and click SELECT.
- 2. Select **START TEST**.
- Over an iLink connection, submit a <u>Party Details Definition Request (35=CX</u>) message with the required party details using On-demand format for trading FX Spot Plus.
- 4. Submit an order for the FX Spot Plus instrument.
- 5. Select **Yes** or **No** to indicate whether your system received and processed the <u>Party Details Definition Request Acknow-ledgment (35=CY)</u>.
- Select Yes or No to indicate whether your system received and processed the Execution Report New Order (35=8,3-39=0) message.

This te	st could take up to several minutes. Please do not close the window during the test. Closing window/stopping test requires to n	erun the	lest from step 1
Purp	56e		
Thep	surpose of this test is to verify that the client system can submit an order with the required party details for trading FX Spot Pluz	k.	
Selec	ted Instrument(s); Unlock		
	Press the Start Test button to start or restart a Test. Please do not press the Start Test button if you are currently running this test.	\$	TART TEST
		Tes	t Not Running
Desc	ription	Tes	t Not Running Status
Desc 1	ription Over an ILink connection, submit a Party Details Definition Request(35=CX) message with the required party details using On-demand format for trading FX Spot Plus.		Status
Desc 1	Over an iLink connection, submit a Party Details Definition Request(35=CX) message with the required party	Flag	Status Not Tested
1	Over an ILink connection, submit a Party Details Definition Request(35=CX) message with the required party details using On-demand format for trading FX Spot Plus.	Flag	

FX Spot Plus GFS (Day) Limit Order Test for Pre-Registered Format

The purpose of this test is to verify the client system can submit, receive, and process Acknowledgement, Fill, and Elimination messages when an order expires after the market close.

This test case is mandatory if you selected Yes in the interview question Will your system support GFS Order?

- 1. On the Test Case tab, use the Instrument(s) drop down menu to choose an instrument and channel and click SELECT.
- 2. Select **START TEST**.
- 3. Over an iLink connection, submit a GFS Limit Order message with a quantity of 1 million for the selected FX Spot Plus instrument.
- Select Yes or No to indicate whether your system received and processed the Execution Report New Order (35=8,39=0) message.
- Select Yes or No to indicate whether your system received and processed the Execution Report Trade Outright (35=8,39=1, 2) message.
- 6. Select **Yes** or **No** to indicate whether your system received and processed an <u>Execution Report Elimination</u> (35=8,39=C) message for eliminating the remaining quantity after the market close.

This te	st could take up to s	everal minutes. Please d	to not close th	e window during the test. Closing window/stopping test requires t	o rerun the	test from step1
Purp	ose					
	purpose of this test in ed after the market of		im can submit	receive and process the Acknowledgement, Fill and Elimination	message v	when order
Selec	ted Instrument(s):	Unlock			
		est button to start or res by running this test.	start a Test. P	lease do not press the Start Test button		TART TEST
			start a Test. P	lease do not press the Start Test button		IART TEST
agair			start a Test. P	lease do not press the Start Test button		
agair	n if you are current	ty running this test.		lease do not press the Start Test button r message with a quantity of 1 million for the selected FX	Ter	it Not Running
Desc	cription Over an iLink of Spot Plus instr	ty running this test.	FS Limit Ord	r message with a quantity of 1 million for the selected FX	Ter	st Not Running Status
Desc 1	ription Over an ILInk of Spot Plus Instr Receive and P	ty running this test.	FS Limit Orde	ir message with a quantity of 1 million for the selected FX er message.	Ter	Status Not Tested

FX Spot Plus GFS (Day) Limit Order Test for On-Demand Format

The purpose of this test is to verify the client system can submit, receive, and process Acknowledgement, Fill, and Elimination messages when an order expires after the market close.

This test case is mandatory if you selected Yes in the interview question Will your system support GFS Order?

- 1. On the Test Case tab, use the Instrument(s) drop down menu to choose an instrument and channel and click SELECT.
- 2. Select START TEST.
- 3. Over an iLink connection, submit a GFS Limit Order message with a quantity of 1 million for the selected FX Spot Plus instrument.
- 4. Select **Yes** or **No** to indicate whether your system received and processed the <u>Execution Report New Order</u> (35=8,39=0) message.
- 5. Select **Yes** or **No** to indicate whether your system received and processed the <u>Execution Report Trade Outright</u> (35=8,39=1, 2) message.
- Select Yes or No to indicate whether your system received and processed an <u>Execution Report Elimination</u> (35=8,39=C) message for eliminating the remaining quantity after the market close.

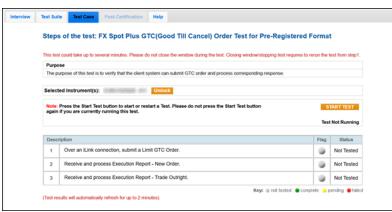
This te	st could take up to several minutes. Please do not close the window during the test. Closing window/stopping test requires to re	erun the	test from step1
Purp	OSE		
	urpose of this test is to verify the client system can submit, receive and process the Acknowledgement, Fill and Elimination me of after the market close.	issage w	hen order
arbe	ou deter ture trike was wuode.		
Selec	ted Instrument(s): Unlock		
agai	Press the Start Test button to start or restart a Test. Please do not press the Start Test button if you are currently running this test.	_	TART TEST
_		_	
_	If you are currently running this test.	Tes	t Not Running
Des	If you are currently running this test. ription Over an Link connection, submit a GFS Limit Order message with a quantity of 1 million for the selected FX	Tes	t Not Running Status
Desi	If you are currently running this test. ription Over an ILink connection, submit a GFS Limit Order message with a quantity of 1 million for the selected FX Spot Plus instrument.	Tes	t Not Running Status Not Tested

FX Spot Plus GTC (Good Till Cancel) Order Test for Pre-Registered Format

The purpose of this test is to verify that the client system can submit a GTC order and process the corresponding response.

This test case is mandatory if you selected Yes in the interview question Will your system support GTC Order?

- 1. On the Test Case tab, use the Instrument(s) drop down menu to choose an instrument and channel and click SELECT.
- 2. Select **START TEST**.
- 3. Over an iLink connection, submit a Limit GTC Order.
- Select Yes or No to indicate whether your system received and processed the Execution Report New Order (35=8,3-39=0) message.
- 5. Select **Yes** or **No** to indicate whether your system received and processed the <u>Execution Report Trade Outright</u> (35=8,39=1, 2) message.

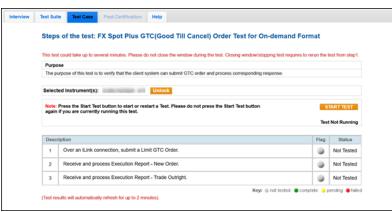


FX Spot Plus GTC (Good Till Cancel) Order Test for On-Demand Format

The purpose of this test is to verify that the client system can submit a GTC order and process the corresponding response.

This test case is mandatory if you selected Yes in the interview question Will your system support GTC Order?

- 1. On the **Test Case** tab, use the **Instrument(s)** drop down menu to choose an instrument and channel and click **SELECT**.
- 2. Select **START TEST**.
- 3. Over an iLink connection, submit a Limit GTC Order.
- Select Yes or No to indicate whether your system received and processed the Execution Report New Order (35=8,3-39=0) message.
- 5. Select **Yes** or **No** to indicate whether your system received and processed the <u>Execution Report Trade Outright</u> (35=8,39=1, 2) message.

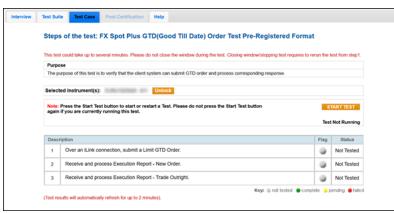


FX Spot Plus GTD (Good-Till-Date) OrderTest Pre-Registered Format

The purpose of this test is to verify that the client system can submit a GTD order and process the corresponding response.

This test case is mandatory if you selected Yes in the interview question Will your system support GTD Order?

- 1. On the Test Case tab, use the Instrument(s) drop down menu to choose an instrument and channel and click SELECT.
- 2. Select **START TEST**.
- 3. Over an iLink connection, submit a Limit GTD Order.
- Select Yes or No to indicate whether your system received and processed the Execution Report New Order (35=8,3-39=0) message.
- 5. Select **Yes** or **No** to indicate whether your system received and processed the <u>Execution Report Trade Outright</u> (35=8,39=1, 2) message.



FX Spot Plus GTD (Good-Till-Date) Order Test On-Demand Format

The purpose of this test is to verify that the client system can submit a GTD order and process the corresponding response.

This test case is mandatory if you selected Yes in the interview question Will your system support GTD Order?

- 1. On the Test Case tab, use the Instrument(s) drop down menu to choose an instrument and channel and click SELECT.
- 2. Select **START TEST**.
- 3. Over an iLink connection, submit a Limit GTD Order.
- Select Yes or No to indicate whether your system received and processed the Execution Report New Order (35=8,3-39=0) message.
- 5. Select **Yes** or **No** to indicate whether your system received and processed the Execution Report Trade Outright (35=8,39=1, 2) message.

Step	os of the test: FX Spot Plus GTD(Good Till Date) Order Test On-demand Format		
This t	st could take up to several minutes. Please do not close the window during the test. Closing window/stopping test requires to rer	run the t	est from step1.
Pur	xxxx		
The	purpose of this test is to verify that the client system can submit GTD order and process corresponding response.		
	cted Instrument(s): Unlock		
Not	Press the Start Test button to start or restart a Test. Please do not press the Start Test button If you are currently running this test.		IART TEST
Not aga	Press the Start Test button to start or restart a Test. Please do not press the Start Test button		
Not aga	Press the Start Test button to start or restart a Test. Please do not press the Start Test button If you are currently running this test.	Test	Not Running
Not aga	: Press the Start Test button to start or restart a Test. Please do not press the Start Test button n if you are currently nurving this test.	Test	Not Running Status

FX Spot Plus FOK (Fill-Or-Kill) Order Test for Pre-Registration Format

FX Spot Plus does not support the (FOK) Fill-Or-Kill order qualifier. The purpose of this test is to ensure customers know how to adjust a FAK (Fill-and-Kill) order to simulate FOK behavior.

This test case is mandatory if you selected Yes in the interview question Will your system support FOK Order?

- 1. On the Test Case tab, use the Instrument(s) drop down menu to choose an instrument and channel and click SELECT.
- 2. Select START TEST.
- 3. Submit a Limit FAK Order with a quantity of 1 Million and set MinQty the same as OrderQty.
- Select Yes or No to indicate whether your system received and processed the Execution Report New Order (35=8,39=0) message.
- 5. Select **Yes** or **No** to indicate whether your system received and processed an <u>Execution Report Elimination</u> (35=8,39=C) message for eliminating the remaining quantity after the market close.
- 6. Submit a Limit FAK Order with a quantity of 1 Million and set MinQty the same as OrderQty.
- 7. Select **Yes** or **No** to indicate whether your system received and processed the <u>Execution Report New Order</u> (35=8,39=0) message.
- Select Yes or No to indicate whether your system received and processed the Execution Report Trade Outright (35=8,39=1, 2) message.

Step	s of the test: FX Spot Plus FOK(Fill Or Kill) Order Test for Pre-Registered For	rmat	
This te	t could take up to several minutes. Please do not close the window during the test. Closing window/stopping test requi	res to rerun the t	lest from step1
Purp	OS#		
	pot Plus does not support the FOK(Fill-Or-Kill) order qualifier. The purpose of this test is to ensure customers know how to simulate FOK behavior.	r to adjust an FA	K(Fill-and-Kill)
0100			
Selec	ted Instrument(s): Unlock		
Note			
	Press the Start Test button to start or restart a Test. Please do not press the Start Test button If you are currently running this test.	S	TART TEST
		_	TART TEST
agair	If you are currently running this test.	Tes	t Not Running
agair		_	
agair	If you are currently running this test.	Tes	t Not Running Status
Desc	if you are currently running this test.	Tes	Status Not Testec
Desc 1	If you are currently running this test. ription Submit a Limit FAX Order with a quantity of 1 Million and setting MinQty the same as OrderQty.	Tes	Status Not Testec
Desc 1 2	If you are currently running this test. ription Submit a Limit FAX Order with a quantity of 1 Million and setting MinQty the same as OrderQty. Receive and process Execution Report - New Order.	Tes	t Not Running
Desc 1 2 3	If you are currently numing this test. ription Submit a Limit FAK Order with a quantity of 1 Million and setting MinQty the same as OrderQty. Receive and process Execution Report - New Order. Receive and process Execution Report - Elimination.	Tes	Not Running Status Not Tester Not Tester

FX Spot Plus FOK (Fill-Or-Kill) Order Test for On-Demand Format

FX Spot Plus does not support the (FOK) Fill-Or-Kill order qualifier. The purpose of this test is to ensure customers know how to adjust a FAK (Fill-and-Kill) order to simulate FOK behavior.

This test case is mandatory if you selected Yes in the interview question Will your system support FOK Order?

- 1. On the Test Case tab, use the Instrument(s) drop down menu to choose an instrument and channel and click SELECT.
- 2. Select **START TEST**.
- 3. Submit a Limit FAK Order with a quantity of 1 Million and set MinQty the same as OrderQty.
- Select Yes or No to indicate whether your system received and processed the Execution Report New Order (35=8,39=0) message.
- 5. Select **Yes** or **No** to indicate whether your system received and processed an <u>Execution Report Elimination</u> (35=8,39=C) message for eliminating the remaining quantity after the market close.
- 6. Submit a Limit FAK Order with a quantity of 1 Million and set MinQty the same as OrderQty.
- 7. Select **Yes** or **No** to indicate whether your system received and processed the <u>Execution Report New Order</u> (35=8,39=0) message.
- Select Yes or No to indicate whether your system received and processed the Execution Report Trade Outright (35=8,39=1, 2) message.

Step			
This te	it could take up to several minutes. Please do not close the window during the test. Closing window/stopping test requi	res to regul the t	iest from sten1
Purp			and the state of the
FX S order	ot Plus does not support the FOK(Fill-Or-Kill) order qualifier. The purpose of this test is to ensure customers know how to simulate FOK behavior.	v to adjust an FA	K(Fill-and-Kill)
Selec	ted Instrument(s): Unlock		
	Press the Start Test button to start or restart a Test. Please do not press the Start Test button	_	
		s	TART TEST
agair	if you are currently running this test.	5	TART TEST
agair			IART TEST
	If you are currently running this test.	Test	t Not Running
	if you are currently running this test.		
	If you are currently running this test.	Test	Not Running Status
Desc	if you are currently running this test.	Test	Status Not Tested
Desc 1	if you are currently running this test. ription Submit a Limit FAK Order with a quantity of 1 Million and setting MinOty the same as OrderQty.	Test	Status Not Tested
Desc 1 2	If you are currently running this test. ription Submit a Limit FAK Order with a quantity of 1 Million and setting MinOty the same as OrderQty. Receive and process Execution Report - New Order.	Test	t Not Running
Desc 1 2 3	If you are currently running this test. ription Submit a Limit FAK Order with a quantity of 1 Million and setting MinOty the same as OrderOty. Receive and process Execution Report - New Order. Receive and process Execution Report - New Order.	Test	Status Not Tested Not Tested Not Tested

FX Spot Plus Market-Limit Order Test for Pre-Registered Format

The purpose of this test is to verify the client system can submit and cancel a Market-Limit order, and receive and process the Acknowledgement and Fill messages .

This test case is mandatory if you selected **Market Limit Order** in the interview question **Which order types will your system support?**

- 1. On the Test Case tab, use the Instrument(s) drop down menu to choose an instrument and channel and click SELECT.
- 2. Select **START TEST**.
- 3. Over an iLink connection, submit a Market-Limit Order message with a quantity of 1 million for the selected FX Spot Plus instrument.
- Select Yes or No to indicate whether your system received and processed the Execution Report New Order (35=8,3-39=0) message.
- 5. Select **Yes** or **No** to indicate whether your system received and processed the Execution Report Trade Outright (35=8,39=1, 2) message.
- 6. Submit an Order Cancel Request message for the remaining quantity left on the original order submitted.
- Select Yes or No to indicate whether your system received and processed the Execution Report Cancel (35=8,39=4) message.

Step	os of the test: FX Spot Plus Market-Limit Order Test for Pre-Registered Format		
This to	st could take up to several minutes. Please do not close the window during the test. Closing window/stopping test requires to re	orun the t	lest from step1
Purp	xose		
	purpose of this test is to verify the client system can submit and cancel a market-limit order and receive and process the Acknow sages.	wledgern	ent and Fill
Selec	ted Instrument(s): Unlock		
	: Press the Start Test button to start or restart a Test. Please do not press the Start Test button if you are currently running this test.		TART TEST
agai	n if you are currently running this test.	Test	t Not Running
agai			
Des	n if you are currently numing this test. cription Over an ILink connection, submit Market-Limit Order message with a quantity of 1 million for the selected FX	Test	t Not Running Status
Des 1	origtion Over an ILink connection, submit Market-Limit Order message with a quantity of 1 million for the selected FX Spot Plus instrument.	Test	t Not Running Status Not Tested
agai Des 1	If you are currently numing this test. cription Over an Link connection, submit Market-Limit Order message with a quantity of 1 million for the selected FX Spot Plus Instrument. Receive and Process Execution Report - New Order message.	Test	Not Running Status Not Tested Not Tested

FX Spot Plus Market-Limit Order Test for On-Demand Format

The purpose of this test is to verify the client system can submit and cancel a Market-Limit order, and receive and process the Acknowledgement and Fill messages .

This test case is mandatory if you selected **Market Limit Order** in the interview question **Which order types will your system support?**

- 1. On the **Test Case** tab, use the **Instrument(s)** drop down menu to choose an instrument and channel and click **SELECT**.
- 2. Select **START TEST**.
- 3. Over an iLink connection, submit a Market-Limit Order message with a quantity of 1 million for the selected FX Spot Plus instrument.
- Select Yes or No to indicate whether your system received and processed the Execution Report New Order (35=8,3-39=0) message.
- 5. Select **Yes** or **No** to indicate whether your system received and processed the Execution Report Trade Outright (35=8,39=1, 2) message.
- 6. Submit an Order Cancel Request message for the remaining quantity left on the original order submitted.
- 7. Select **Yes** or **No** to indicate whether your system received and processed the Execution Report Cancel (35=8,39=4) message.

Test Sui	te Test Case Post Certification Help		
Step	s of the test: FX Spot Plus Market-Limit Order Test for On-demand Format		
This tes	t could take up to several minutes. Please do not close the window during the test. Closing window/stopping test requires to re	run the t	lest from step 1.
Purpo	56		
The p messi	urpose of this test is to verify the client system can submit and cancel a market-limit order and receive and process the Acknow ges.	vledgem	ent and Fill
Select	ed Instrument(s): Unlock		
	Press the Start Test button to start or restart a Test. Please do not press the Start Test button If you are currently running this test.		TART TEST
Desc	ription	Flag	Status
1	Over an iLink connection, submit Market-Limit Order message with a quantity of 1 million for the selected FX Spot Plus instrument.		Not Tested
2	Receive and Process Execution Report - New Order message.	٠	Not Tested
3	Receive and Process Execution Report - Trade Outright message.	٠	Not Tested
4	Submit an Order Cancel Request message for the remaining quantity left on the original order submitted.	٠	Not Tested
5	Receive and process Execution Report - Cancel message.		Not Tested
(Test re	Keyr 🏐 not tested 🔹 compli suits will automatically refresh for up to 2 minutes).	ete 😑 p	ending 😑 failed

FX Spot Plus Market Order Test for Pre-Registered Format

The purpose of this test is to verify the client system can submit and cancel a Market Order and receive and process the Acknowledgement and Fill messages.

This test case is mandatory if you selected **Market order with protection** in the interview question **Which order types will your system support?**

- 1. On the Test Case tab, use the Instrument(s) drop down menu to choose an instrument and channel and click SELECT.
- 2. Select **START TEST**.
- 3. Over an iLink connection, submit a Market Order message with a quantity of 1 million for the selected FX Spot Plus instrument.
- 4. Select **Yes** or **No** to indicate whether your system received and processed the Execution Report New Order (35=8) (39=0) message.
- 5. Select **Yes** or **No** to indicate whether your system received and processed the Execution Report Trade Outright (35=8,39=1, 2) message.
- 6. Submit an Order Cancel Request message for the remaining quantity left on the original order submitted.
- Select Yes or No to indicate whether your system received and processed the Execution Report Cancel (35=8,39=4) message.

Step	s of the test: FX Spot Plus Market Order Test for Pre-Registered Format		
This te	st could take up to several minutes. Please do not close the window during the test. Closing window/stopping test requires to re	erun the t	lest from step1
Purp	ose		
	purpose of this test is to verify the client system can submit and cancel a market order and receive and process the Acknowledg ages.	gement a	nd Fill
Selec	ted Instrument(s): Unlock		
	Press the Start Test button to start or restart a Test. Please do not press the Start Test button if you are currently running this test.		TART TEST
agai	if you are currently running this test.		TART TEST
agai			
agai	if you are currently running this test.	Test	t Not Running Status
Des	If you are currently running this test.	Test	t Not Running Status Not Tested
Des 1	If you are currently running this test. cription Over an ILink connection, submit Market Order message with a quantity of 1 million for the selected FX Spot Plus instrument.	Test	Not Running Status Not Tested
agai	If you are currently running this test.	Test	t Not Running

FX Spot Plus Market Order Test for On-Demand Format

The purpose of this test is to verify the client system can submit and cancel a Market Order and receive and process the Acknowledgement and Fill messages.

This test case is mandatory if you selected **Market order with protection** in the interview question **Which order types will your system support?**

- 1. On the **Test Case** tab, use the **Instrument(s)** drop down menu to choose an instrument and channel and click **SELECT**.
- 2. Select **START TEST**.
- 3. Over an iLink connection, submit a Market Order message with a quantity of 1 million for the selected FX Spot Plus instrument.
- 4. Select **Yes** or **No** to indicate whether your system received and processed the Execution Report New Order (35=8) (39=0) message.
- 5. Select **Yes** or **No** to indicate whether your system received and processed the Execution Report Trade Outright (35=8,39=1, 2) message.
- 6. Submit an Order Cancel Request message for the remaining quantity left on the original order submitted.
- 7. Select **Yes** or **No** to indicate whether your system received and processed the Execution Report Cancel (35=8,39=4) message.

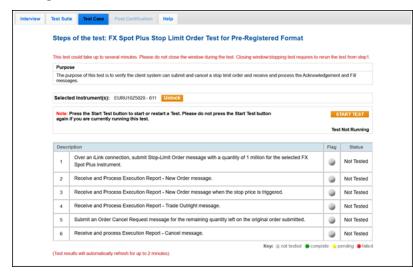
Step	s of the test: FX Spot Plus Market Order Test for On-demand Format		
	st could take up to several minutes. Please do not close the window during the test. Closing window/stopping test requires to r	erun the t	est from step1.
Puŋ			
	purpose of this test is to verify the client system can submit and cancel a market order and receive and process the Acknowled lages.	igement a	nd Fill
	a ga a s		
Sele	ted Instrument(s): Unlock		
Note	Press the Start Test button to start or restart a Test. Please do not press the Start Test button		TART TEST
			DOCT TEOT
	If you are currently running this test.	_	
		_	Not Running
agai		_	
agai	if you are currently running this test.	Test	Not Running
agai	If you are currently running this test. cription Over an ILink connection, submit Market Order message with a quantity of 1 million for the selected FX Spot	Test	Not Running Status
agai Des 1	If you are currently numing this test. cription Over an ILink connection, submit Market Order message with a quantity of 1 million for the selected FX Spot Plus instrument.	Test	Not Running Status Not Tested
Des 1 2	If you are currently numing this test.	Test	Not Running Status Not Tested Not Tested

FX Spot Plus Stop-Limit Order Test for Pre-Registered Format

The purpose of this test is to verify the client system can submit and cancel a Stop-Limit order and receive and process the Acknowledgement and Fill messages.

This test case is mandatory if you selected **Stop Limit Order** in the interview question **Which order types will your system support?**

- 1. On the Test Case tab, use the Instrument(s) drop down menu to choose an instrument and channel and click SELECT.
- 2. Select **START TEST**.
- 3. Over an iLink connection, submit a Stop-Limit Order message with a quantity of 1 million for the selected FX Spot Plus instrument.
- Select Yes or No to indicate whether your system received and processed the Execution Report New Order (35=8,3-39=0) message.
- Select Yes or No to indicate whether your system received and processed the Execution Report New Order (35=8,3-39=0) message when the Stop is triggered.
- Select Yes or No to indicate whether your system received and processed the Execution Report Trade Outright (35=8,39=1, 2) message.
- 7. Submit an Order Cancel Request message for the remaining quantity left on the original order submitted.
- Select Yes or No to indicate whether your system received and processed the Execution Report Cancel (35=8,39=4) message.



FX Spot Plus Stop-Limit Order Test for On-Demand Format

The purpose of this test is to verify the client system can submit and cancel a Stop-Limit order and receive and process the Acknowledgement and Fill messages.

This test case is mandatory if you selected **Stop Limit Order** in the interview question **Which order types will your system support?**

- 1. On the **Test Case** tab, use the **Instrument(s)** drop down menu to choose an instrument and channel and click **SELECT**.
- 2. Select **START TEST**.
- 3. Over an iLink connection, submit a Stop-Limit Order message with a quantity of 1 million for the selected FX Spot Plus instrument.
- Select Yes or No to indicate whether your system received and processed the Execution Report New Order (35=8,3-39=0) message.
- Select Yes or No to indicate whether your system received and processed the Execution Report New Order (35=8,3-39=0) message when the Stop is triggered.
- Select Yes or No to indicate whether your system received and processed the Execution Report Trade Outright (35=8,39=1, 2) message.
- 7. Submit an Order Cancel Request message for the remaining quantity left on the original order submitted.
- Select Yes or No to indicate whether your system received and processed the Execution Report Cancel (35=8,39=4) message.

	s of the test: FX Spot Plus Stop Limit Order Test for On-demand Format		
This to	st could take up to several minutes. Please do not close the window during the test. Closing window/stopping test requires to	o rerun the t	iest from step
Purp			
	surpose of this test is to verify the client system can submit and cancel a stop limit order and receive and process the Acknow ages.	wledgement	and Fill
Selec	ted Instrument(s): Unlock		
	Press the Start Test button to start or restart a Test. Please do not press the Start Test button	S	TART TEST
agai	if you are currently running this test.		
			Not Running
Des	ription	Flag	Status
Des 1	rription Over an Link connection, submit Stop-Limit Order message with a quantity of 1 million for the selected FX Spot Plus instrument.	Flag	
	Over an iLink connection, submit Stop-Limit Order message with a quantity of 1 million for the selected FX	Flag	Not Tester
1	Over an ILink connection, submit Stop-Limit Order message with a quantity of 1 million for the selected FX Spot Plus instrument.	Flag	Not Tester
1	Over an Link connection, submit Stop-Limit Order message with a quantity of 1 million for the selected FX Spot Plus instrument. Receive and Process Execution Report - New Order message.	Flag	Status Not Tested Not Tested Not Tested
1 2 3	Over an Link connection, submit Stop-Limit Order message with a quantity of 1 million for the selected FX Spot Flus instrument. Receive and Process Execution Report - New Order message. Receive and Process Execution Report - New Order message when the stop price is triggered.	Flag	Not Tested Not Tested

FX Spot Plus Stop Order Test for Pre-Registered Format

The purpose of this test is to verify the client system can submit and cancel a Stop Order and receive and process the Acknowledgement and Fill messages.

This test case is mandatory if you selected **Stop order with protection** in the interview question **Which order types will your system support?**

- 1. On the Test Case tab, use the Instrument(s) drop down menu to choose an instrument and channel and click SELECT.
- 2. Select **START TEST**.
- 3. Over an iLink connection, submit a Stop Order message with a quantity greater than 1.
- Select Yes or No to indicate whether your system received and processed the Execution Report New Order (35=8,3-39=0) message.
- Select Yes or No to indicate whether your system received and processed the Execution Report New Order (35=8,3-39=0) message when the Stop is triggered.
- Select Yes or No to indicate whether your system received and processed the Execution Report Trade Outright (35=8,39=1, 2) message.
- 7. Submit an Order Cancel Request message for the remaining quantity left on the original order submitted.
- Select Yes or No to indicate whether your system received and processed the Execution Report Cancel (35=8,39=4) message.

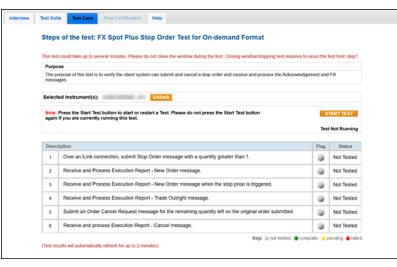
This te	st could take up to several minutes. Please do not close the window during the test. Closing window/stopping test requires to	o rerun the t	lest from step
Purp	056		
The p mess	surpose of this test is to verify the client system can submit and cancel a stop order and receive and process the Acknowledgages.	gement and	Fill
Selec	ted Instrument(s): Unlock		
	Press the Start Test button to start or restart a Test. Please do not press the Start Test button	S	TART TEST
agair	if you are currently running this test.		
		Test	Not Running
		Test	Not Running
Desc	ription	Test Flag	Not Running Status
Desc 1	ription Over an iLink connection, submit Stop Order message with a quantity greater than 1.		Status
			Status Not Tester
1	Over an iLink connection, submit Stop Order message with a quantity greater than 1.		Status Not Tester
1	Over an ILink connection, submit Stop Order message with a quantity greater than 1. Receive and Process Execution Report - New Order message.		
1 2 3	Over an ILink connection, submit Stop Order message with a quantity greater than 1. Receive and Process Execution Report - New Order message. Receive and Process Execution Report - New Order message when the stop price is triggered.		Status Not Testec Not Testec

FX Spot Plus Stop Order Test for On-Demand Format

The purpose of this test is to verify the client system can submit and cancel a Stop Order and receive and process the Acknowledgement and Fill messages.

This test case is mandatory if you selected **Stop order with protection** in the interview question **Which order types will your system support?**

- 1. On the **Test Case** tab, use the **Instrument(s)** drop down menu to choose an instrument and channel and click **SELECT**.
- 2. Select **START TEST**.
- 3. Over an iLink connection, submit a Stop Order message with a quantity greater than 1.
- Select Yes or No to indicate whether your system received and processed the Execution Report New Order (35=8,3-39=0) message.
- Select Yes or No to indicate whether your system received and processed the Execution Report New Order (35=8,3-39=0) message when the Stop is triggered.
- Select Yes or No to indicate whether your system received and processed the Execution Report Trade Outright (35=8,39=1, 2) message.
- 7. Submit an Order Cancel Request message for the remaining quantity left on the original order submitted.
- Select Yes or No to indicate whether your system received and processed the Execution Report Cancel (35=8,39=4) message.



FX Spot Plus Self match prevention with Pre-registered administrative SelfMatchPreventionInstruction

The purpose of this test is to verify the client system can correctly support Self Match Prevention functionality. Customers may create and register their Globex Firm ID and SMP ID via the Request Center NR/CERT.

This test case is mandatory if you selected **Yes** in the interview question **Will your system support Self Match Prevention**?, and if you also selected **Pre-Registration (Service Gateway)** in the interview question **How does your application register Administrative Information**?

- 1. On the Test Case tab, use the Instrument(s) drop down menu to choose an instrument and channel and click SELECT.
- 2. Select **START TEST**.
- 3. Submit a Party Details Definition Request (35=CX) message with a tag 2362-SelfMatchPreventionID value and a tag 8000-SelfMatchPreventionInstruction value of "O" to the Service Gateway for trading FX Spot Plus.
- 4. Select **Yes** or **No** to indicate whether your system received and processed the <u>Party Details Definition Request Acknow-ledgment (35=CY)</u>.
- 5. Over an iLink connection, submit a Buy Limit order with the tag 1505-PartyDetailsListReqID registered in Step 3.
- Select Yes or No to indicate whether your system received and processed the Execution Report New Order (35=8,3-39=0) message.
- 7. Submit a Sell Limit order using the same tag 1505-PartyDetailsListReqID and price as the order in Step 5.
- Select Yes or No to indicate whether your system received and processed the Execution Report Cancel (35=8,39=4) message for the Limit order. You should receive tag 378-ExecRestatementReason=103 (Cancel Resting due to Self Match Prevention).
- 9. Submit a Party Details Definition Request (35=CX) message with the same tag 2362-SelfMatchPreventionID value as Step 3 and a tag 8000-SelfMatchPreventionInstruction value of "N" to the Service Gateway for trading FX Spot Plus.
- 10. Select **Yes** or **No** to indicate whether your system received and processed the <u>Party Details Definition Request Acknow-ledgment (35=CY)</u>.
- 11. Over an iLink connection, submit a Buy Order with the <u>tag 1505-PartyDetailsListReqID</u> registered in Step 9 and the same price as the order in Step 5.
- 12. Select **Yes** or **No** to indicate whether your system received and processed the Execution Report New Order (35=8,3-39=0) message.
- Select Yes or No to indicate whether your system received and processed the Execution Report Cancel (35=8,39=4) message for the Limit order. You should receive tag 378-ExecRestatementReason=107 (Cancel Aggressing due to Self Match Prevention).

	os of the test: FX Spot Plus Self match prevention with Pre-registered administrati MatchPreventionInstruction	ve	
This te	st could take up to several minutes. Please do not close the window during the test. Closing window/stopping test requires to re	erun the t	lest from step
Purp	xxxx		
and	purpose of this test is to verify the client system can correctly support self match prevention functionality. Conformers may register SNP Divis the Request Center NR-CERT: <u>https://www.cmegroue.com/bols-information/weithelpicme-resourcet-center-re-centC</u> ention_smp.html	er their G	Hobex Firm IE If-match-
Selec	ted Instrument(s): Unlock		
	: Press the Start Test button to start or restart a Test. Please do not press the Start Test button If you are currently running this test.	S	TART TEST
		Test	Not Runnin
Des	cription	Flag	Status
1	Submit a Party Details Definition Request(35=CX) message with SelfMatchPreventionID and SelfMatchPreventionInstruction with value as "O" to Service Gateway.		Not Tester
2	Receive and process Party Details Definition Request Acknowledgment.	٠	Not Tester
3	Over an iLink connection, submit a Buy Order with PartyDetailsListReqID registered in Step 1.		Not Tester
4	Receive and Process Execution Report - New Order.		Not Tester
5	Submit a Sell Order with the same PartyDetailsListReqID and price as the order in Step 3.		Not Tester
6	Receive and Process Execution Report - Cancel for the Limit order.	٠	Not Tester
7	Submit a Party Details Definition Request(35=CX) message with SelfMatchPreventionID same as Step 1 and SelfMatchPreventionInstruction with value as *N* to Service Gateway.		Not Tester
8	Receive and process Party Details Definition Request Acknowledgment.		Not Tester
9	Over an ILink connection, submit a Buy Order with PartyDetailsListReqID registered in Step 7 and the same price as the order in Step 5.		Not Tester
10	Receive and Process Execution Report - New Order.	٠	Not Tester
11	Receive and Process Execution Report - Cancel for the Limit order.		Not Tester

FX Spot Plus Self match prevention with On-demand administrative SelfMatchPreventionInstruction

The purpose of this test is to verify the client system can correctly support Self Match Prevention functionality. Customers may create and register their Globex Firm ID and SMP ID via the Request Center NR/CERT.

This test case is mandatory if you selected **Yes** in the interview question **Will your system support Self Match Prevention?**, and if you also selected **On-demand** in the interview question **How does your application register Administrative Information?**

- 1. On the **Test Case** tab, use the **Instrument(s)** drop down menu to choose an instrument and channel and click **SELECT**.
- 2. Select START TEST.
- 3. Submit a Party Details Definition Request (35=CX) message with a tag 2362-SelfMatchPreventionID value and a tag 8000-SelfMatchPreventionInstruction value of "O" to the Service Gateway for trading FX Spot Plus.
- 4. Submit a Buy order.
- Select Yes or No to indicate whether your system received and processed the <u>Party Details Definition Request Acknow-</u> ledgment (35=CY).
- Select Yes or No to indicate whether your system received and processed the Execution Report New Order (35=8,3-39=0) message.
- 7. Submit a Party Details Definition Request (35=CX) message with the same tag 2362-SelfMatchPreventionID value as Step 3 and a tag 8000-SelfMatchPreventionInstruction value of "O" to the Service Gateway.
- 8. Submit a Sell Order with the same price as the order in Step 4.
- 9. Select **Yes** or **No** to indicate whether your system received and processed the <u>Party Details Definition Request Acknow-ledgment (35=CY)</u>.
- Select Yes or No to indicate whether your system received and processed the Execution Report Cancel (35=8,39=4) message for the Limit order. You should receive tag 378-ExecRestatementReason=103 (Cancel Resting due to Self Match Prevention).
- 11. Submit a Party Details Definition Request (35=CX) message with the same tag 2362-SelfMatchPreventionID value as Step 3 and a tag 8000-SelfMatchPreventionInstruction value of "N" to the Service Gateway for trading FX Spot Plus.
- 12. Submit a Buy Order with the same price as the order in Step 8.
- 13. Select **Yes** or **No** to indicate whether your system received and processed the <u>Party Details Definition Request Acknow-ledgment (35=CY)</u>.
- 14. Select **Yes** or **No** to indicate whether your system received and processed the Execution Report New Order (35=8,3-39=0) message.
- 15. Select **Yes** or **No** to indicate whether your system received and processed the <u>Party Details Definition Request Acknow-ledgment (35=CY)</u>.
- Select Yes or No to indicate whether your system received and processed the Execution Report Cancel (35=8,39=4) message for the Limit order. You should receive tag 378-ExecRestatementReason=107 (Cancel Aggressing due to Self Match Prevention).

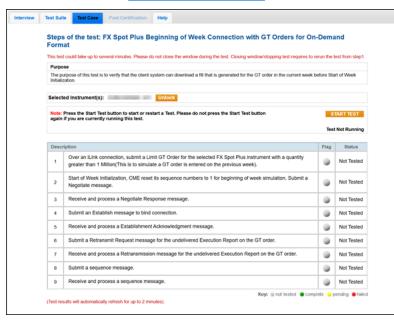
	is of the test: FX Spot Plus Self match prevention with On-demand administrative MatchPreventionInstruction		
This te	st could take up to several minutes. Please do not close the window during the test. Closing window/stopping test requires to r	erun the	lest from step
and	ose purpose of this lest is to verify the client system can correctly support self match prevention functionality. Customers may regis shall PD via the Request Center NR/CERT: https://www.cmegroue.com/bolis-information/web/elb/ime-repuest-center.er/cert/C informarch/trid	ter their C ontent/se	Bobex Firm II If-match:
Selec	ted Instrument(s): 1 Unlock		
	Press the Start Test button to start or restart a Test. Please do not press the Start Test button if you are currently running this test.	5	TART TEST
		Tes	t Not Runnin
Des	ription	Flag	Status
1	Over an iLink connection, submit a Party Details Definition Request(35=CX) message with SetfMatchPreventionID and SetfMatchPreventionInstruction with value as *0*.		Not Teste
2	Submit a Buy Order.		Not Teste
3	Receive and process Party Details Definition Request Acknowledgment.		Not Teste
4	Receive and Process Execution Report - New Order.		Not Teste
5	Submit a Party Details Definition Request(35=CX) message with SelfMatchPreventionID in Step 1 and SelfMatchPreventionInstruction with value as "O".		Not Teste
6	Submit a Sell Order with the same price as the order in Step 2.		Not Teste
7	Receive and process Party Details Definition Request Acknowledgment.		Not Tester
8	Receive and Process Execution Report - Cancel for the Limit order.	۵	Not Teste
9	Submit a Party Details Definition Request(35=CX) message with SelfMatchPreventionID same as Step 1 and SelfMatchPreventionInstruction with value as *N*.		Not Teste
10	Submit a Buy Order with the same price as the order in Step 6.	۵	Not Teste
11	Receive and process Party Details Definition Request Acknowledgment.	۲	Not Teste
12	Receive and Process Execution Report - New Order.	۵	Not Teste
13	Receive and process Party Details Definition Request Acknowledgment.	۵	Not Teste
14	Receive and Process Execution Report - Cancel for the Limit order.		Not Teste

FX Spot Plus Beginning of Week Connection with GT Orders for On-Demand Format

The purpose of this test is to verify that the client system can download a fill that is generated for a GTC or GTD order in the current week before Start of Week Initialization.

This test case is mandatory if you selected **On-Demand** in the interview question **How does your application register Administrative Information**, and **Yes** in either the interview question **Will your system support GTC Order?** or **Will your system support GTD Order?**

- 1. On the Test Case tab, use the Instrument(s) drop down menu to choose an instrument and channel and click SELECT.
- 2. Select **START TEST**.
- 3. Over an iLink connection, submit a Limit GT Order for the selected FX Spot Plus instrument with a quantity greater than 1 Million (this is to simulate a GT order was entered in the previous week).
- 4. Start of Week Initialization: CME resets its sequence numbers to "1" for the beginning of week simulation. Submit a Negotiate (35=Negotiate) message.
- 5. Receive and process a Negotiation Response (35=NegotiationResponse) message.
- 6. Submit an Establish (35=Establish) message to bind the connection.
- Select Yes or No to indicate whether your system received and processed an Establishment Acknowledgment (35=E-EstablishmentAck) message.
- 8. Submit a <u>Retransmit Request (35=RetransmitRequest)</u> message for the undelivered Execution Report on the GT order.
- 9. Select **Yes** or **No** to indicate whether your system received and processed a <u>Retransmission (35=Retransmission)</u> message for the undelivered Execution Report on the GT order.
- 10. Submit a Sequence (35=Sequence) message.
- 11. Receive and process a Sequence (35=Sequence) message.



iLink Order Status Request for Pre-Registered Format

The purpose of this test is to verify that a customer application can submit an Order Status Request (35=H) and receive an Execution Report - Status (35=8, 150=I) when obtaining status for the order.

This test case is mandatory if you selected **Yes** in the interview question **Does your system support Order Status functionality?**

- 1. On the **Test Case** tab, use the **Instrument(s)** drop down menu to choose an instrument and channel and click **SELECT**.
- 2. Select **START TEST**.
- 3. Over an iLink connection, send a Limit Order using one of the selected dummy instruments.
- Select Yes or No to indicate whether your system received and processed the Execution Report New Order (35=8,3-39=0) message.
- 5. Send an Order Status Request (35=H) message for the order in Step 3.
- 6. Receive and Process Execution Report Status (35=8 & 150=I).

		istered Format		
This	test could take up to several minutes. Please do not close the window during the test	t. Closing window/stopping test requires to	rerun the	lest from step 1.
Pu	rpose			
	Purpose of this test is to verify that customer application can submit Order Status I en obtaining status for the order.	tequest(35=H) and receive Execution Repo	vrt - Status	(35=8, 150=1)
Sele	ected Instrument(s): EURU1025029 - 611 Unlock			
	te: Press the Start Test button to start or restart a Test. Please do not press the in if you are currently running this test.	Start Test button	S	TART TEST
		Start Test button		TART TEST
age		Start Test button		
age	if you are currently running this test.		Tes	t Not Running
De	in if you are currently running this test. scription Over an ILInk connection, send a Limit Order message using one of the		Tes	t Not Running Status
De	In If you are currently running this test. scription Over an ILInk connection, send a Limit Order message using one of the Receive and Process Execution Report - New Order.		Tes	Status Not Tested

iLink Order Status Request for On-Demand Format

The Purpose of this test is to verify that a customer application can submit an Order Status Request (35=H) and receive an Execution Report - Status (35=8, 150=I) when obtaining status for the order.

This test case is mandatory if you selected **Yes** in the interview question **Does your system support Order Status functionality**?

- 1. On the Test Case tab, use the Instrument(s) drop down menu to choose an instrument and channel and click SELECT.
- 2. Select **START TEST**.
- 3. Over an iLink connection, send a Limit Order using one of the selected dummy instruments.
- Select Yes or No to indicate whether your system received and processed the Execution Report New Order (35=8,3-39=0) message.
- 5. Send an Order Status Request (35=H) message for the order in Step 3.
- 6. Receive and Process Execution Report Status (35=8 & 150=I).

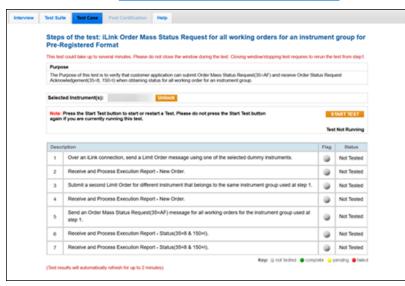
	t could take up to several minutes. Please do not close the window during the test. Closing window/stopping test requires to	o rerun the t	lest from step
	typose of this test is to verify that customer application can submit Order Status Request(35=H) and receive Execution Rep obtaining status for the order.	oort - Status	(35=8, 150=I)
Selec	led Instrument(s): Unlock		
	Press the Start Test button to start or restart a Test. Please do not press the Start Test button if you are currently running this test.	S	TART TEST
		Test	Not Running
Desc	nption	Flag	Status
Desc 1	nption Over an ILink connection, send a Limit Order message using one of the selected dummy instruments.		Status
			Status Not Tester
1	Over an iLink connection, send a Limit Order message using one of the selected dummy instruments.		Status Not Tested Not Tested Not Tested

iLink Order Mass Status Request for all working orders for an instrument group for Pre-Registered Format

The Purpose of this test is to verify that the customer application can submit an Order Mass Status Request (35=AF) and receive an Order Status Request Acknowledgement (35=8, 150=I) when obtaining status for all working orders for an instrument group.

This test case is mandatory if you selected **Instrument Group** in the interview question **Which Mass Order Status Functionality does your system support?**

- 1. On the **Test Case** tab, use the **Instrument(s)** drop down menu to choose an instrument and channel and click **SELECT**.
- 2. Select **START TEST**.
- 3. Over an iLink connection, send a Limit Order using one of the selected dummy instruments.
- Select Yes or No to indicate whether your system received and processed the Execution Report New Order (35=8,3-39=0) message.
- 5. Submit a second Limit Order for a different instrument in the same instrument group used in Step 3.
- Select Yes or No to indicate whether your system received and processed the Execution Report New Order (35=8,3-39=0) message.
- 7. Send a Order Mass Status Request (35=AF) message for all working orders for the instrument group used at Step 3.
- 8. Receive and process Execution Report Status (35=8 & 150=1) for the first order.
- 9. Receive and process Execution Report Status (35=8 & 150=I) for the second order.

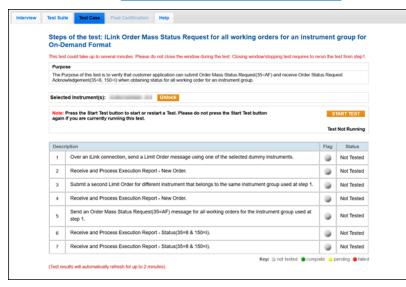


iLink Order Mass Status Request for all working orders for an instrument group for On-Demand Format

The Purpose of this test is to verify that the customer application can submit an Order Mass Status Request (35=AF) and receive an Order Status Request Acknowledgement (35=8, 150=I) when obtaining status for all working orders for an instrument group.

This test case is mandatory if you selected **Instrument Group** in the interview question **Which Mass Order Status Functionality does your system support?**

- 1. On the Test Case tab, use the Instrument(s) drop down menu to choose an instrument and channel and click SELECT.
- 2. Select START TEST.
- 3. Over an iLink connection, send a Limit Order using one of the selected dummy instruments.
- Select Yes or No to indicate whether your system received and processed the Execution Report New Order (35=8,3-39=0) message.
- 5. Submit a second Limit Order for a different instrument in the same instrument group used in Step 3.
- Select Yes or No to indicate whether your system received and processed the Execution Report New Order (35=8,3-39=0) message.
- 7. Send a Order Mass Status Request (35=AF) message for all working orders for the instrument group used at Step 3.
- 8. Receive and process Execution Report Status (35=8 & 150=I) for the first order.
- 9. Receive and process Execution Report Status (35=8 & 150=I) for the second order.



iLink Order Mass Status Request for all working orders for an instrument for Pre-Registered Format

The Purpose of this test is to verify that customer application can submit an Order Mass Status Request (35=AF) and receive an Order Status Request Acknowledgement (35=8, 150=1) when obtaining status for all working orders for an instrument group.

This test case is mandatory if you selected **Instrument** in the interview question **Which Mass Order Status Functionality does** your system support?

- 1. On the Test Case tab, use the Instrument(s) drop down menu to choose an instrument and channel and click SELECT.
- 2. Select START TEST.
- 3. Over an iLink connection, send a Limit Order using one of the selected dummy instruments.
- Select Yes or No to indicate whether your system received and processed the Execution Report New Order (35=8,3-39=0) message.
- 5. Submit a second Limit Order using the same instrument used in Step 3 increasing the price.
- Select Yes or No to indicate whether your system received and processed the Execution Report New Order (35=8,3-39=0) message.
- 7. Send a Order Mass Status Request (35=AF) message for all working orders for an instrument.
- 8. Receive and process Execution Report Status (35=8 & 150=I) for the first order.
- 9. Receive and process Execution Report Status (35=8 & 150=1) for the second order.

	s of the test: ILink Order Mass Status Request for all working orders for an insi stered Format	trument	for Pre-
This te	st could take up to several minutes. Please do not close the window during the test. Closing window/stopping test requires t	to rerun the t	est from step1.
Purp			
The I Ackn	Purpose of this test is to verify that customer application can submit Order Mass Status Request(35=AF) and receive Order owledgement(35=8, 150=1) when obtaining status for all working order for an instrument.	Status Requ	rest
Note	ted Instrument(s): Unlock Press the Start Test button to start or restart a Test. Please do not press the Start Test button If you are currently unlining this test.	S	IART TEST
ogan	n you we contemp running and rec	Test	Not Running
Desc	ription	Flag	Status
Desi	Inplion Over an ILink connection, send a Limit Order message using one of the selected dummy instruments.	Plag	Not Tested
_		Plag	
1	Over an iLink connection, send a Limit Order message using one of the selected dummy instruments.		Not Tested
1	Over an ILink connection, send a Limit Order message using one of the selected dummy instruments. Receive and Process Execution Report - New Order.		Not Tested
1 2 3	Over an ILink connection, send a Limit Order message using one of the selected dummy instruments. Receive and Process Execution Report - New Order. Submit a second Limit Order using the same instrument used at step 1 increasing the price.		Not Tested Not Tested
1 2 3 4	Over an Link connection, send a Limit Order message using one of the selected dummy instruments. Receive and Process Execution Report - New Order. Submit a second Limit Order using the same instrument used at step 1 increasing the price. Receive and Process Execution Report - New Order.		Not Tested Not Tested Not Tested Not Tested

iLink Order Mass Status Request for all working orders for an instrument for On-Demand Format

The Purpose of this test is to verify that customer application can submit an Order Mass Status Request (35=AF) and receive an Order Status Request Acknowledgement (35=8, 150=1) when obtaining status for all working orders for an instrument group.

This test case is mandatory if you selected **Instrument** in the interview question **Which Mass Order Status Functionality does** your system support?

- 1. On the Test Case tab, use the Instrument(s) drop down menu to choose an instrument and channel and click SELECT.
- 2. Select START TEST.
- 3. Over an iLink connection, send a Limit Order using one of the selected dummy instruments.
- Select Yes or No to indicate whether your system received and processed the Execution Report New Order (35=8,3-39=0) message.
- 5. Submit a second Limit Order using the same instrument used in Step 3 increasing the price.
- Select Yes or No to indicate whether your system received and processed the Execution Report New Order (35=8,3-39=0) message.
- 7. Send a Order Mass Status Request (35=AF) message for all working orders for an instrument.
- 8. Receive and process Execution Report Status (35=8 & 150=I) for the first order.
- 9. Receive and process Execution Report Status (35=8 & 150=I) for the second order.

Dem	s of the test: ILink Order Mass Status Request for all working orders for an in and Format to dottake up to several minutes. Please do not dose the window during the test. Closing windowidagoing test require		
Purp	056		
The F Ackn	Purpose of this test is to verify that customer application can submit Order Mass Status Request(35=AF) and receive Orde owledgement(35=8, 150=1) when obtaining status for all working order for an instrument.	er Status Requ	iest
Sele	cted Instrument(s): Unlock		
	:: Press the Start Test button to start or restart a Test. Please do not press the Start Test button n If you are currently running this test.		START TEST
		Ter	st Not Running
Desc	ription	Flag	Status
1	Over an iLink connection, send a Limit Order message using one of the selected dummy instruments.		Not Tested
2	Receive and Process Execution Report - New Order.		Not Tested
3	Submit a second Limit Order using the same instrument used at step 1 increasing the price.		Not Tested
4	Receive and Process Execution Report - New Order.		Not Tested
5	Submit an Order Mass Status Request(35=AF) message for all working orders for an instrument.		Not Tested
6	Receive and Process Execution Report - Status(35=8 & 150=I).		Not Tested
	Receive and Process Execution Report - Status(35=8 & 150=1).		Not Tested

Support MOSR functionality for a particular market segment for Pre-Registration Format

The purpose of this test is to verify that the client system customer application can submit an Order Mass Status Request (35=AF) and receive an Order Status Request Acknowledgement (35=8, 150=I) when obtaining status for all working orders for a specific market segment.

This test case is mandatory if you selected **Market Segment** in the interview question **Which Mass Order Status Functionality does your system support?**

- 1. On the Test Case tab, use the Instrument(s) drop down menu to choose an instrument and channel and click SELECT.
- 2. Select **START TEST**.
- 3. Over an iLink connection, submit a Limit Order for the selected instrument.
- Select Yes or No to indicate whether your system received and processed the Execution Report New Order (35=8,3-39=0) message.
- 5. Using the same instrument, submit a second Limit Order.
- Select Yes or No to indicate whether your system received and processed the Execution Report New Order (35=8,3-39=0) message.
- 7. Submit a Mass Status Request (35=AF) message with tag 585-MassStatusReqType=100 for all orders for a specific Market Segment.
- 8. Receive and process Execution Report Status (35=8 & 150=I) for the first order.
- 9. Receive and process Execution Report Status (35=8 & 150=1) for the second order.

Forn	s of the test: Support MOSR functionality for a particular market segment for Pr at	re-Regi	stered
This te	It could take up to several minutes. Please do not close the window during the test. Closing window/stopping test requires to	o rerun the t	test from step1
Purp The p Requ	bite urpose of this test is to verify that client system customer application can submit Order Mass Status Request(35=AF) and re est Acknowledgement(35=8, 150=1) when obtaining status for all working order for a specific market segment.	ceive Orde	r Status
Selec	ted Instrument(s): Unlock		
	Press the Start Test button to start or restart a Test. Please do not press the Start Test button if you are currently running this test.	S	TART TEST
		Test	t Not Running
Desc	ription	Flag	Status
1	Over an iLink connection, submit a Limit Order for the selected instrument.		Not Tested
2	Receive and Process Execution Report - New Order.		Not Tested
2	Using the same instrument, submit a second Limit Order.		Not Tested
3			
-	Receive and Process Execution Report - New Order.		Not Tested
3		0	
3	Receive and Process Execution Report - New Order. Submit Order Status Request(35=AF) message with tag 586-MassStatusReqType=100 for all orders for a	9 9 9	Not Tested Not Tested Not Tested

Support MOSR functionality for a particular market segment for On-Demand Format

The purpose of this test is to verify that the client system customer application can submit an Order Mass Status Request (35=AF) and receive an Order Status Request Acknowledgement (35=8, 150=I) when obtaining status for all working orders for a specific market segment.

This test case is mandatory if you selected **Market Segment** in the interview question **Which Mass Order Status Functionality does your system support?**

- 1. On the Test Case tab, use the Instrument(s) drop down menu to choose an instrument and channel and click SELECT.
- 2. Select START TEST.
- 3. Over an iLink connection, submit a Limit Order for the selected instrument.
- Select Yes or No to indicate whether your system received and processed the Execution Report New Order (35=8,3-39=0) message.
- 5. Using the same instrument, submit a second Limit Order.
- Select Yes or No to indicate whether your system received and processed the Execution Report New Order (35=8,3-39=0) message.
- 7. Submit a Mass Status Request (35=AF) message with tag 585-MassStatusReqType=100 for all orders for a specific Market Segment.
- 8. Receive and process Execution Report Status (35=8 & 150=I) for the first order.
- 9. Receive and process Execution Report Status (35=8 & 150=I) for the second order.

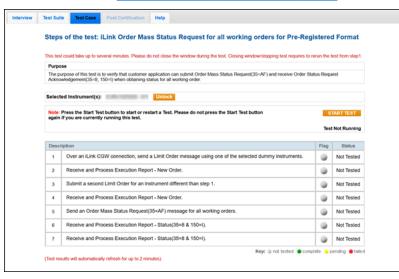
Form	s of the test: Support MOSR functionality for a particular market segment for Ontent test and the segment for O	n-Dema	nd
This te	st could take up to several minutes. Please do not close the window during the test. Closing windowistopping test requires to	o rerun the t	test from step1
Purp	056		
The Req.	surpose of this test is to verify that client system customer application can submit Order Mass Status Request(35=AF) and re est Acknowledgement(35=8, 150=I) when obtaining status for all working order for a specific market segment.	sceive Orde	v Status
Selec	ted Instrument(s): Unlock		
	Press the Start Test button to start or restart a Test. Please do not press the Start Test button if you are currently running this test.	S	TART TEST
		Test	t Not Running
Des	ription	Flag	Status
1	Over an ILink connection, submit a Limit Order for the selected instrument.		Not Tested
	Receive and Process Execution Report - New Order.		Not Tested
2			Not Tested
2	Using the same instrument, submit a second Limit Order.		
-	Using the same instrument, submit a second Limit Order. Receive and Process Execution Report - New Order.	9	
3		0 0	Not Tested
3	Receive and Process Execution Report - New Order. Submit Order Status Request(35=AF) message with tag 586-MassStatusReqType=100 for all orders for a	9 9 9 9	Not Tested

iLink Order Mass Status Request for all working orders for Pre-Registered Format

The Purpose of this test is to verify that the customer application can submit an Order Mass Status Request (35=AF) and receive an Order Status Request Acknowledgement (35=8, 150=I) when obtaining status for all working orders for an instrument group.

This test case is mandatory if you selected **All Orders** in the interview question **Which Mass Order Status Functionality does** your system support?

- To run the test
 - 1. On the Test Case tab, use the Instrument(s) drop down menu to choose an instrument and channel and click SELECT.
 - 2. Select **START TEST**.
 - 3. Over an iLink CGW connection, send a Limit Order message using one of the selected dummy instruments.
 - 4. Select **Yes** or **No** to indicate whether your system received and processed the <u>Execution Report New Order (35=8,3-39=0)</u> message.
 - 5. Submit a second Limit Order for an instrument different than Step 3.
 - Select Yes or No to indicate whether your system received and processed the Execution Report New Order (35=8,3-39=0) message.
 - 7. Send a Order Mass Status Request (35=AF) message for all working orders.
 - 8. Receive and process Execution Report Status (35=8 & 150=I) for the first order.
 - 9. Receive and process Execution Report Status (35=8 & 150=I) for the second order.

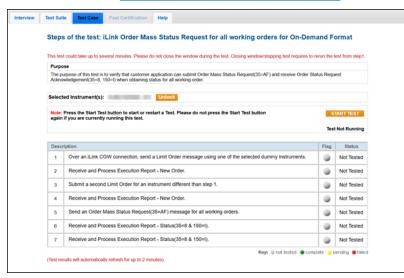


iLink Order Mass Status Request for all working orders for On-Demand Format

The Purpose of this test is to verify that the customer application can submit an Order Mass Status Request (35=AF) and receive an Order Status Request Acknowledgement (35=8, 150=I) when obtaining status for all working orders for an instrument group.

This test case is mandatory if you selected **All Orders** in the interview question **Which Mass Order Status Functionality does** your system support?

- To run the test
 - 1. On the Test Case tab, use the Instrument(s) drop down menu to choose an instrument and channel and click SELECT.
 - 2. Select START TEST.
 - 3. Over an iLink connection, send a Limit Order using one of the selected dummy instruments.
 - Select Yes or No to indicate whether your system received and processed the Execution Report New Order (35=8,3-39=0) message.
 - 5. Submit a second Limit Order for a different instrument in the same instrument group used in Step 3.
 - Select Yes or No to indicate whether your system received and processed the Execution Report New Order (35=8,3-39=0) message.
 - 7. Send a Order Mass Status Request (35=AF) message for all working orders.
 - 8. Receive and process Execution Report Status (35=8 & 150=I) for the first order.
 - 9. Receive and process Execution Report Status (35=8 & 150=I) for the second order.



Futures and Options MDP for FX Spot Plus Certification

Use the **Test Suite** tab to run the **F&O MDP for FX Spot Plus** certification test cases required to certify your application. You are required to select and run each test case in the test suite. Test cases are available based on your Interview responses.

	Current Testing C	Configura	ition			
Tester: Company Name: Market: Purpose: Application System: Test Suite: NOTE: This	DA v (DA v) (Market Data v) (Market Data v) (Faco MOP for FX, Sport Plus v) test suite utilizes the NEWRELEASE environment.	1	Category: Pr 603: 604: M	utomated Trading op System arketData arketData	g System	
dentifier:	JINNED UMASSIGN	P	est Suite Sta Pre-Certification fest Suite State soose a diffe	on Interview: us:	Complete O Not Tested	-down.
NOTE: TOU	chose a resultg Application system. If your intertuon is to certai					
Interview Test Su	Test Case Post Certification Help					
Interview Test Su		Retest	Flag	Status Not Tested	Mandatory/Optional	Executed By Not Available
Interview Test Su Security Definition 1	Test Case Post Certification Help F&O MDP for FX Spot Plus Certification Tests		Flag		, , , , , , , , , , , , , , , , , , , ,	
Security Definition 1	Test Case Post Certification Help FAO MDP for FX Spot Plas Certification Tests Messages For FX Soct Plas.		Flag	Not Tested	Mandatory	Not Available
Interview Test Su Security Definition 1 EX Spot Plus Book EX Spot Plus Book	Test Case Post Certification Help FAO IND for FX Spot Plas Certification Tests Management Messages for FX Soci Plas. Management Messages for Market by Price/MBP).		Flag	Not Tested Not Tested	Mandatory Mandatory	Not Available Not Available
Security: Definition I EX.Spot Plus Book EX.Spot Plus Book EX.Spot Plus Conse	Test Case Post Certification Help FAO MDP for FX Spot Plus Certification Tests Management Messages for Market by Price(MBP), Management Messages for Market by Order(MBD),		Flag a a a a a a	Not Tested Not Tested Not Tested	Mandatory Mandatory Mandatory	Not Available Not Available Not Available
Security Definition I EX Soot Plus Book EX Soot Plus Book EX Soot Plus Conso EX Soot Plus Imple	Test Case Post Certification Help FAO MDP for IX Spot Plas Certification Tests Messages For FX Soct Plas. Management Messages for Market by Price/MBP). Management Messages for Market by Order/MBO). olidated Book Management Messages for Market by Price/Imciled		Flag	Not Tested Not Tested Not Tested Not Tested	Mandatory Mandatory Mandatory Mandatory	Not Available Not Available Not Available
Interview Text Su Security Definition 1 EX Stot Flue Book EX Stot Flue Book EX Stot Flue Intelle EX Stot Flue Intelle	Test Case Post Certification Help FAO MOP for FX Spot Plass Certification Tests Messages For FX Soot Plus. Management Messages for Market by Price/MBP). Management Messages for Market by Criter/MBD). oblated Book Management Messages for Market by Criter/MBD		Flag 0 0 0 0 0 0 0 0 0 0 0 0 0	Not Tested Not Tested Not Tested Not Tested Not Tested	Mandatory Mandatory Mandatory Mandatory Mandatory	Not Available Not Available Not Available Not Available Not Available

Security Definition Messages For FX Spot Plus

The purpose of this test is to verify that your application can properly receive and process FX Spot Plus Security Definition Messages.

This test case is mandatory.

- 1. On the **Test Case** tab, use the **Instrument(s)** drop down menu to choose an instrument and channel and click **SELECT**.
- 2. Select START TEST.
- 3. Confirm that your application successfully received and processed the Security Definition Message.

Step	s of the test: Se	ecurity Definition Messages For FX Spot Plus		
This te	t could take up to sever	ral minutes. Please do not close the window during the test. Closing window/stopping test requ	ires to rerun the	test from step1.
Purp	ose			
The p	urpose of this test is to v	verify that your application can properly receive and process FX Spot Plus Security Definition	Messages.	
Instru	ment(s):	Select Instrument(s) - Channel V	lect	
Instru	ment(s):	[Select Instrument(s) - Channel V	lect	
	ment(s):	[Select instrument(s) - Channel V	ect Flag	Status

FX Spot Plus Book Management Messages for Market by Price (MBP)

The purpose of this test is to verify that your application can properly receive and process book management information for non-implied markets.

This test case is mandatory if you selected **Market by Price** in the interview question **Which of the following ones does your application support?**

- 1. On the **Test Case** tab, use the **Instrument(s)** drop down menu to choose an instrument and channel and click **SELECT**.
- 2. Select **START TEST**.
- 3. Select Yes or No to confirm books are empty for the selected instruments.
- 4. Receive a set of orders for the instrument.
- 5. Receive cancellations for orders.
- 6. Confirm quantities and prices on the book for the instrument, which varies based on the instrument book sent.

	s of the test: FX Spot Plus Book Management Messages for Market by Price (MB	P)	
This te	t could take up to several minutes. Please do not close the window during the test. Closing window/stopping test requires to r	erun the t	test from step1
Purp	ose		
The	urpose of this test is to verify that your application can properly receive and process book management information for non im	plied mar	rkets.
_	ription	Flag	Status
1	Confirm books are empty for selected instruments.		Not Tested
2	Receive a set of orders for the instrument.	۲	Not Tested
3	Receive cancellations for orders.	۲	Not Tested
3			Not Tested

FX Spot Plus Book Management Messages for Market by Order (MBO)

The purpose of this test is to verify that your application can properly receive and process book management information for non-implied markets.

This test case is mandatory if you selected **Market by Order** in the interview question **Which of the following ones does your application support?**

- 1. On the Test Case tab, use the Instrument(s) drop down menu to choose an instrument and channel and click SELECT.
- 2. Select **START TEST**.
- 3. Select Yes or No to confirm books are empty for the selected instruments.
- 4. Receive a set of orders for the instrument.
- 5. Receive cancellations for orders.
- 6. For each order, confirm the price (<u>MDEntryPx</u>) and quantity (<u>MDEntrySize</u>) by its priority in the book for the displayed instrument, which varies based on the instrument book sent.

			t by Order (MBO)	
This te	st could take up to several minu	utes. Please do not close the window during the test. Closing window/stop	ping test requires to rerun the	a test from step?
Purp	ose			
The	surpose of this test is to verify the	hat your application can properly receive and process book management i	information for non implied m	arkets.
Instru	ment(s):	Select Instrument(s) - Channel	Select	
				1
Des	ription		Flag	g Status
Desi	ription Confirm books are empty			g Status Not Tested
Desi 1 2	1	r for selected instruments.		Not Tested
1	Confirm books are empty	y for selected instruments.		-

FX Spot Plus Consolidated Book Management Messages for Market by Price (Implied)

The purpose of this test is to verify that your application can properly receive and process book management information for implied markets.

This test case is mandatory if you selected **Yes** in the interview question **Does your system support implied markets?**, and selected **Market by Price** in the interview question **Which of the following ones does your application support?**.

- 1. On the Test Case tab, use the Instrument(s) drop down menu to choose an instrument and channel and click SELECT.
- 2. Select **START TEST**.
- 3. Select Yes or No to confirm books are empty for the selected instruments.
- 4. Receive a set of orders for the instrument.
- 5. Receive cancellations for orders.
- 6. Confirm <u>quantities</u> and <u>prices</u> on the book for the instrument, including the <u>implied book</u>. The instrument varies based on the instrument book sent.

(unt	lied)	t Plus Consolidated Book	Management Messages	s for Market by Pr	ice
This te	st could take up to several m	tes. Please do not close the window dur	ing the test. Closing window/stopping	test requires to rerun the t	est from step1
	ose				
The	purpose of this test is to verify	at your application can properly receive	and process book management infor	mation for implied markets	
Instr	ument(s):	Select Instrument(s) - Channel	~	Se	leat
Des	cription			Flag	Status
1	Confirm books are emp	for selected instruments.			Not Tested
1.1	Receive a set of orders for one of the selected instrument.				Not Tested
2	Receive a set of orders	r one of the selected instrument.			
⊢.	Receive a set of orders Receive cancellations				Not Tested

FX Spot Plus Implied Order Book Management for Market by Order Systems

The purpose of this test is to verify that your application can properly receive and process book management information for implied markets.

This test case is mandatory if you selected **Yes** in the interview question **Does your system support implied markets?**, and selected **Market by Order** in the interview question **Which of the following ones does your application support?**.

- 1. On the Test Case tab, use the Instrument(s) drop down menu to choose an instrument and channel and click SELECT.
- 2. Select START TEST.
- 3. Select Yes or No to confirm books are empty for the selected instruments.
- 4. Receive a set of orders for the instrument.
- 5. For each order, confirm the price (<u>MDEntryPx</u>) and quantity (<u>MDEntrySize</u>) by its priority in the book for the displayed instrument, which varies based on the instrument book sent.
- 6. Confirm the <u>implied</u> quantities and prices on the book for the same instrument. The instrument varies based on the instrument book sent.

			o implied	Order DOOK	managem	ent for Marke	t by Order S	yster	ms
This to	st could take up to several mi	inutes Dies	ana da ant ci	one the window durin	on the last Cine	ine window/straning	test requires to rest	un the t	ant from stars
Pure		INVER L'AR	age of no. of		ig the lest. One	n y minorin angon y	ABA TEQUIES TO TEL		est nom step
	purpose of this test is to verify	y that your a	application of	an properly receive a	and process boo	k management infor	nation for implied r	narkets	
Instr	ument(s):	Sel	ect Instrum	ent(s) - Channel		~		Sel	lect
Des	sription							Flag	Status
1	Confirm books are emp	pty for sele	ected instrun	nents.				٠	Not Tester
	Receive a set of orders for one of the selected instrument.							۲	Not Tester
2	receive a set of orders	For each order, confirm the price and quantity by its priority in the book using the following instrument.					nent.		Not Tester
2		the price	and quantity	y by its priority in th	ne book using t				

FX Spot Plus Consolidated Recovery Test for Market by Price (Implied)

The purpose of this test is to verify that your application can perform a recovery test for implied books. For example, if a user does not receive all messages from the system during a trading session, it will be necessary to perform a recovery to update the books.

This test case is mandatory if you selected **Yes** in the interview question **Does your system support implied markets**?, and selected **Market by Price** in the interview question **Which of the following ones does your application support**?.

- 1. On the Test Case tab, use the Instrument(s) drop down menu to choose an instrument and channel and click SELECT.
- 2. Select **START TEST**.
- 3. Select Yes or No to confirm books are empty for the selected instruments.
- 4. Receive market data for a set of orders and cancels for the instrument.
- 5. Miss market data for a set of orders and cancels, and recover the messages with the snapshot feed.
- 6. Receive market data for a set of orders and cancels for the recovery instrument.
- 7. Confirm <u>quantities</u> and <u>prices</u> on the book for the instrument, including the <u>implied book</u>. The instrument varies based on the instrument book sent.

orop	s of the test: FX Spo	t Plus Cons	olidated Recovery Te	st for Market by Pri	ce (implied)	
This te	st could take up to several minut	es. Please do not	close the window during the test.	Closing window/stopping test	requires to rerun the t	test from step1
Purp	ose					
The mest	surpose of this test is to verify the ages from the system during a to	at your application rading session, it v	can perform a recovery test for in will be necessary to perform recov	mplied books. For example, if very to update the books.	a user does not receiv	re all
Instru	iment(s):	Select Instru	ment(s) - Channel	¥	Set	lect
Des	ription				Flag	Status
1	Confirm books are empty f	for selected instr	uments.		۲	Not Tested
2	Receive market data for a	set of orders and	d cancels for the instrument.			Not Tested
3	Miss market data for a set	of orders and ca	ncels and to recover with snap	oshot feed.		Not Tested
4	Receive market data for a	set of orders and	d cancels for the recovery instr	ument.		Not Tested
	Conference and the second set	es on the book t	or the selected instrument(incl	uding implied book).		Not Tested

FX Spot Plus Implied Recovery Test for Market by Order Systems

The purpose of this test is to verify that your application can perform a recovery test for implied books. For example, if a user does not receive all messages from the system during a trading session, it will be necessary to perform a recovery to update the books.

This test case is mandatory if you selected **Yes** in the interview question **Does your system support implied markets?**, and selected **Market by Order** in the interview question **Which of the following ones does your application support?**.

- 1. On the **Test Case** tab, use the **Instrument(s)** drop down menu to choose an instrument and channel and click **SELECT**.
- 2. Select **START TEST**.
- 3. Select **Yes** or **No** to confirm books are empty for the selected instruments.
- 4. Receive market data for a set of orders and cancels for the instrument.
- 5. Miss market data for a set of orders and cancels and recover the messages with the snapshot feed.
- 6. Receive market data for a set of orders and cancels for the recovery instrument.
- 7. Confirm <u>quantities</u> and <u>prices</u> on the book for the instrument, including the <u>implied book</u>. The instrument varies based on the instrument book sent.

Systems	
g test requires to rerun the t	test from step1.
vie, if a user does not receiv	re all
Set	lect
Flag	Status
	Not Tested
۲	Not Tested
	test requires to rerun the le. if a user does not receiv

FX Spot Plus Recovery Test for Market by Price (MBP)

The purpose of this test is to verify that your application can perform a recovery test. For example, if a user does not receive all messages from the system during a trading session, it will be necessary to perform a recovery to update the books.

This test case is mandatory if you selected **No** in the interview question **Does your system support implied markets**?, and selected **Market by Price** in the interview question **Which of the following ones does your application support**?

- 1. On the **Test Case** tab, use the **Instrument(s)** drop down menu to choose an instrument and channel and click **SELECT**.
- 2. Select **START TEST**.
- 3. Select Yes or No to confirm books are empty for the selected instruments.
- 4. Receive market data for a set of orders and cancels for the instrument.
- 5. Miss market data for a set of orders and cancels and recover the messages with the snapshot feed.
- 6. Receive market data for a set of orders and cancels for the recovery instrument.
- 7. Confirm <u>quantities</u> and <u>prices</u> on the book for the instrument (non-implied). The instrument varies based on the instrument book sent.

	os of the test: FX Spo				. ,		
This te	ist could take up to several minut	is. Please do	io not close the window di	uring the test. Closing v	window/stopping test requi	res to rerun the	test from step?
The	purpose of this test is to verify the g a trading session, it will be nec	t your applic essary to per	tation can perform a reco	very test. For example, the books.	if a user does not receive	all messages fr	om the system
Inste	ument(s):	Release	instrument(s) - Channel	×	Sel		
insu	umenųs).	Other	nsoumenius) - Channe	Ţ	30	NGL	
Des	cription					Flag	Status
1	Confirm books are empty f	or selected	instruments.				Not Tested
2	Receive market data for a	set of orders	s and cancels for the in	nstrument.			Not Tested
3	Miss market data for a set	of orders an	nd cancels and to recov	ver with snapshot fee	d.		Not Tested
4	Receive market data for a	set of orders	s and cancels for the re	ecovery instrument.			Not Tester
	-			strument (non implied	0		Not Tested

FX Spot Plus Recovery Test for Market by Order

The purpose of this test is to verify that your application can perform a recovery test for non-implied books. For example, if a user does not receive all messages from the system during a trading session, it will be necessary to perform a recovery to update the books.

This test case is mandatory if you selected **No** in the interview question **Does your system support implied markets?**, and selected **Market by Order** in the interview question **Which of the following ones does your application support?**

- 1. On the Test Case tab, use the Instrument(s) drop down menu to choose an instrument and channel and click SELECT.
- 2. Select **START TEST**.
- 3. Select Yes or No to confirm books are empty for the selected instruments.
- 4. Receive market data for a set of orders and cancels for the instrument.
- 5. Miss market data for a set of orders and cancels and recover the messages with the snapshot feed.
- 6. Receive market data for a set of orders and cancels for the recovery instrument.
- 7. Confirm <u>quantities</u> and <u>prices</u> on the book for the instrument. The instrument varies based on the instrument book sent.

This has		Plus Recovery Test for Market by Order (MBO)	to fast requires to serve the	test from step1		
This test could take up to several minutes. Please do not close the window during the test. Closing window/stopping test requires to rerun the test from step1 Purpose						
The purpose of this test is to verify that your application can perform a recovery test for non-implied books. For example, if a user does not receive all messages from the system during a trading session, it will be necessary to perform recovery to update the books.						
	and a second strain cound a ca	and assessed a second state of the behavior in the second by the sponta and social				
Instru	strument(s): Select Instrument(s) - Channel V		Select			
Desc	ription		Flag	Status		
1	Confirm books are empty for selected instruments.			Not Tested		
2	Receive market data for a se		Not Tested			
3	Miss market data for a set of orders and cancels and to recover with snapshot feed.			Not Tested		
4	Receive market data for a set of orders and cancels for the recovery instrument.			Not Tested		
5	For each order, confirm the	ument.	Not Tested			
(Test re	sults will automatically refresh for		ot tested 🔵 complete 🥚 p	xending 😝 faile		

FX Spot Plus Statistic Messages

The purpose of this test is to verify that your application can properly receive and process statistic messages. This test case is mandatory.

- 1. On the **Test Case** tab, use the **Instrument(s)** drop down menu to choose an instrument and channel and click **SELECT**.
- 2. Select START TEST.
- 3. A trade summary was sent. Please validate the following values based on the instrument book sent (instrument varies).
 - tag 270-MDEntryPx
 - tag 271-MDEntrySize
- 4. Electronic volume statistics were sent. Please validate the following value: tag 271-MDEntrySize.
- 5. A trading session high price was sent. Please validate the following value: tag 270-MDEntryPX.
- 6. A session low offer was sent. Please validate the following value based on the instrument book sent (instrument varies): tag 270-MDEntryPx.

Interview	Test Sui	Test Case Post Certification Help						
	Steps of the test: FX Spot Plus Statistic Messages							
	This test could take up to several minutes. Please do not close the window during the test. Closing window/stopping test requires to rerun the test from step1.							
	Purpose							
	The purpose of this test is to verify that your application can properly receive and process statistic messages.							
	Instrument(s): Select instrument(s) - Channel V							
	Desc	iption	Flag	Status				
	1	A trade summary was sent. Please validate the following values.		Not Tested				
	2 Electronic volume statistics were sent. Please validate the following values.			Not Tested				
	3	A trading session high price was sent. Please validate the following values.	٠	Not Tested				
	4	A session low offer was sent. Please validate the following values.		Not Tested				
	(Test re	uts will automatically refresh for up to 2 minutes). Keys (a) not tested (a) compl	ete 🔒 p	ending 🛑 faile d				