

AutoCert+ Eris Exchange User Manual

3/15/15

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Table of Contents

Getting Started	4
What's New	5
Interview	6
Security Definition	8
Book Management - Market by Order	10
Recovery via TCP Replay	12
Single Order Book Reset	14
Channel Reset	16
Request for Quote	18

Please submit user experience [feedback](#) about this help system.

Getting Started

The AutoCert+ tool is an automated testing tool for validating application functionality. It provides an easy-to-use web interface for walking through CME Group certification scenarios.

To facilitate the process of connecting a customer application to Streamlined FIX/FAST for the Eris Exchange, CME Group provides a dedicated certification environment to allow customers to test their systems before they complete certification.

The Streamlined FIX/FAST for the Eris Exchange tests focus on verifying that customer applications can receive and process market data messages for Eris Exchange products.

Streamlined FIX/FAST for the Eris Exchange certification testing consists of the following test cases:

- [Security Definition](#)
- [Book Management \(Market by Order\)](#)
- [Recovery via TCP Replay](#)
- [Single Order Book Reset](#)
- [Channel Reset](#)
- [Request for Quote \(RFQ\)](#)

The following assumptions apply to each test case:

- The book is clear at the beginning of any scenario requiring orders to be sent.
- AutoCert+ selects dummy instruments.
- A set of instruments is reserved for each customer while running scenarios that require orders to be sent.

To run and navigate AutoCert+:

1. [Log into](#) the automated certification tool.
2. Review general AutoCert+ test suite [navigation](#) and [general interview](#) information.
3. Complete the [Interview](#) for this test suite.
4. Complete applicable test cases.
5. Complete the certification process from the [Post Certification](#) tab.

What's New

The list below illustrates the updates made to the AutoCert+ Eris Help system.

Date	Author	Topic	Description
10/13/15	JJ		Added Feedback feature
4/15/14	NU	All	Updated links and edited for Help standards.
11/5/12		Security Definition	Updated test to include Security Definition for spreads.
		Interview	Updated to include question about supporting spreads.
9/17/12		Getting Started	Enhanced Getting Started section.
9/23/11			Updated all screens for 4.0 enhancements.
2/24/11			Initial release.

Interview

The interview consists of a series of questions about your system. Based on your responses, certain tests are required and others are optional.

▶ **To complete the interview process:**

1. If you answer "Yes" to the question, "Does your system support RFQ (Request for Quote) Messages?", then the [RFQ \(Request for Quote\) Message](#) test is included as a mandatory test. If you answer "No," the RFQ (Request for Quote) Message test is included as an optional test.
2. If you answer "Yes" to the question, "Does your system support spreads?", then a Security Definition and a Security Definition message with a delete instruction for a spread will be sent during the [Security Definition](#) test.
3. Click "Complete".

Current Testing Configuration

Company Name:	<input type="text" value="CME INTERNAL TESTING"/>	Tester:	<input type="text" value="smoke test8"/>
System Profile:	<input type="text" value="KT Test5 - Non-Automated Trading System 1.0"/>	TestSuite:	<input type="text" value="Eris Exchange"/>
SenderComp:	<input type="text" value="Select SenderComp"/> <input type="button" value="ASSIGN"/>	Test Suite Status: Pre-Certification Interview: ❗ Not Complete Test Suite Status: ❗ Not Tested Eris Exchange Online Help	

Interview | Test Suite | Test Case | Post Certification

Does your system support RFQ (Request for Quote) Messages?

Yes
 No

Does your system support spreads?

Yes
 No

Security Definition

This test verifies that your application can properly receive Security Definition messages and properly handle the deletion of Dynamic Security Definition messages.

Note: This test is mandatory for all customers.

Note: If you answered "Yes" to the question, "Does your system support spreads?" in the [Interview](#), then steps 3 and 4 will be included for this test.

Interview
Test Suite
Test Case
Post Certification

Steps of the test: Security Definition Messages for ERIS Instruments

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 step 1.

Purpose

The purpose of this test is to verify that your application can properly receive Security Definition Messages and properly handle the deletion of Dynamic Security Definition messages.

Selected Contract: 10Y-USD,5Y-USD 20121219 0.500/10Y-USD 20130320 0.500 - 724 Unlock

Category	IP	Port
Incremental Feed A	239.43.100.26	15627
Incremental Feed B	239.43.100.26	15628
TCP Replay	172.16.32.232	12345

Note: Press the Start Test button to start or restart a Test. Please do not press the Start Test button again if you are currently running this test.

START TEST

Description	Status
1 Confirm that your application successfully received and processed Security Definition Response Message.	●
2 Confirm that your application successfully received and processed the delete Security Definition Response Message.	●
3 Confirm that your application successfully received and processed Security Definition Message for a Spread Instrument.	●
4 Confirm that your application successfully received and processed the delete Security Definition Response Message for a Spread Instrument	●

Key: ● not tested ● complete ● pending ● failed

REFRESH

▶ To complete the Security Definition test:

1. From the **Contract** drop-down, select the desired contract if the contract is not already locked.
2. Click the "START TEST" button.

Note: DO NOT select the "START TEST" button once the test is in progress.

3. Confirm that a [Security Definition](#) message was received and processed.

Enter the values for the following tags and click **Submit**:

- tag 55-Symbol
- tag 1151-SecurityGroup

- tag 541-Maturity Date

4. Confirm that a Security Definition message with a delete instruction was received and processed.

Enter the values for the following tags and click **Submit**:

- tag 55-Symbol
- tag 1151-SecurityGroup
- tag 980-SecurityUpdate Action

5. Confirm that a Security Definition message for a spread instrument was received and processed.

Enter the values for the following tags and click **Submit**:

- tag 55-Symbol
- tag 1151-SecurityGroup
- tag 167-SecurityType

6. Confirm that a Security Definition message with a delete instruction for a spread instrument was received and processed.

Enter the values for the following tags and click **Submit**:

- tag 55-Symbol
- tag 1151-SecurityGroup
- tag 980-SecurityUpdate Action

Book Management - Market by Order

This test verifies that you can receive and process book management information that is arranged in Market by Order levels for Eris instruments.

Note: This test is mandatory for all customers.

Current Testing Configuration

Company Name:

System Profile:

SenderComp: UNASSIGN

Tester:

TestSuite:

Test Suite Status:

Pre-Certification Interview: ✔ Complete

Test Suite Status: ▶ In Progress

[Eris Exchange Online Help](#)

Interview
Test Suite
Test Case
Post Certification

Steps of the test: Book Management for ERIS Instruments

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 step 1.

Purpose

The purpose of this test is to verify that your application can properly receive and process book management information that is arranged in Market by Order levels for ERIS Instruments.

Selected Contract: 10Y-USD - 724 Unlock

Category	IP	Port
Incremental Feed A	239.43.100.26	15627
Incremental Feed B	239.43.100.26	15628
TCP Replay	172.16.32.231	20029

Note: Press the Start Test button to start or restart a Test. Please do not press the Start Test button again if you are currently running this test.

START TEST

Description	Status	
1	Confirm that the book is empty.	●
2	Receive and process orders for one instrument.	●
3	Receive cancellations for orders.	●
4	Confirm quantities and prices on the book.	●
5	Receive a new offer book update message at same price.	●
6	Receive a changed bid book update message with new quantity.	●
7	Confirm quantities and prices on the book.	●

Key: ● not tested ● complete ● pending ● failed

REFRESH

▶ To run a Book Management test:

1. From the "Contract" drop-down, select the desired contract if the contract is not already locked.
2. Click the "START TEST" button.

Note: DO NOT select the "START TEST" button once the test is in progress.

3. Confirm that the book is empty.

4. Receive and process orders for one instrument.
5. Receive cancellations for orders.
6. Confirm the quantities and prices on the book.

Enter the price (tag 270-MDEntryPx) and quantity (tag 271-MDEntrySize) for each bid (269=0) and ask (269=1) order now present in the order book.

Confirm quantities and prices on the book.			
Instrument: 10Y-USD			
BuyPrice	BuyQuantity	SellPrice	SellQuantity
0.0	0	0.0	0
0.0	0	0.0	0
0.0	0	0.0	0
0.0	0	0.0	0
0.0	0	0.0	0
0.0	0	0.0	0
0.0	0	0.0	0
0.0	0	0.0	0
0.0	0	0.0	0
0.0	0	0.0	0
0.0	0	0.0	0
0.0	0	0.0	0
0.0	0	0.0	0
0.0	0	0.0	0
<input type="button" value="Submit"/>			

7. Receive a new offer book update message at the same price.
Enter the book level (tag 290-MDEntryPositionNo) and price (tag 270-MDEntryPx) of the new order.
8. Receive a changed bid book update message with a new quantity.
Enter the book level (tag 290-MDEntryPositionNo) and quantity (tag 271-MDEntrySize) of the changed order.
9. Confirm the quantities and prices on the book.
Enter the price (tag 270-MDEntryPx) and quantity (tag 271-MDEntrySize) for each bid (269=0) and ask (269=1) order now present in the order book.

Recovery via TCP Replay

This test verifies that your application can recover missed Streamlined FIX/FAST Eris Exchange messages via TCP Replay.

Note: This test is mandatory for all customers.

Current Testing Configuration

Company Name:

System Profile:

SenderComp:

Tester:

Test Suite:

Test Suite Status:

Pre-Certification Interview: ✔ Complete

Test Suite Status: ▶ In Progress

[Eris Exchange Online Help](#)

Interview
Test Suite
Test Case
Post Certification

Steps of the test: Recovery via TCP Replay for Eris Instruments

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 step 1.

Purpose

The purpose of this test is to verify that your application can perform a recovery via TCP Replay for Eris messages.

Selected Contract: 10Y-USD - 724

Category	IP	Port
Incremental Feed A	239.43.100.26	15627
Incremental Feed B	239.43.100.26	15628
TCP Replay	172.16.32.231	20029

Note: Press the Start Test button to start or restart a Test. Please do not press the Start Test button again if you are currently running this test.

Description	Status
1 Confirm that the book is empty.	●
2 AutoCert+ sends some Market Data book updates then creates a gap that needs to be recovered.	●
3 Establish a TCP connection and submit a Logon message using your AutoCert+ credentials.	●
4 Receive a Logon Confirmation message.	●
5 Submit a Market Data Request message.	●
6 Receive streamlined FIX/FAST recovery messages that were requested in the Market Data Request message.	●
7 Receive and process a Logout message.	●

Key: ● not tested ● complete ● pending ● failed

▶ To run a Recovery via TCP Replay test:

1. From the **Contract** drop-down, select the desired contract if the contract is not already locked.
2. Click the "START TEST" button.

Note: DO NOT select the "START TEST" button once the test is in progress.

3. Confirm that the book is empty.
4. Receive market data book updates. There will be missing messages which need to be recovered.
5. Establish a TCP connection and submit a [Logon](#) message using AutoCert+ credentials.
6. Confirm that a Logon message was received.
7. Submit a [Market Data Request](#) message to request the range of missing messages.
8. Receive Streamlined FIX/FAST recovery messages that were requested in the Market Data Request message.
9. Confirm that a [Logout](#) message was received.

AutoCert+ closes the TCP connection.

Single Order Book Reset

This test verifies that your application can properly receive and process book reset messages in order to recover a single order book.

Note: This test is mandatory for all customers.

Current Testing Configuration

Company Name:

System Profile:

SenderComp : UNASSIGN

Tester :

TestSuite:

Test Suite Status:

Pre-Certification Interview : ✔ Complete

Test Suite Status: In Progress

[Eris Exchange Online Help](#)

[Interview](#) | [Test Suite](#) | **[Test Case](#)** | [Post Certification](#)

Steps of the test: Single Instrument Book Reset for ERIS Instruments

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 step 1.

Purpose

The purpose of this test is to verify that your application can properly receive and process book reset messages in order to recover the book.

Selected Contract : 10Y-USD - 724 Unlock

Category	IP	Port
Incremental Feed A	239.43.100.26	15627
Incremental Feed B	239.43.100.26	15628
TCP Replay	172.16.32.231	20029

Note: Press the Start Test button to start or restart a Test. Please do not press the Start Test button again if you are currently running this test. START TEST

Description	Status
1 Confirm that the book is empty.	●
2 Confirm you have received Book Reset message with 269=J.	●
3 Receive resent book without resetting the report sequence number.	●
4 Confirm quantities and prices on the book for the selected instrument.	●

Key: ● not tested ● complete ● pending ● failed

REFRESH

▶ To complete the Single Order Book Reset test:

1. From the **Contract** drop-down, select the desired contract if the contract is not already locked.
2. Click the **START TEST** button to begin the test.

Note: **DO NOT** select the "START TEST" button once the test is in progress.

3. Confirm that the book is empty.

4. Confirm that the **Book Reset**¹ message was received.

Note: Tag 83-RptSeq should increment up from the last value from the previous message.

5. Receive the resent book message and process the orders.
6. Confirm the quantities and prices on the book.

Enter the price (tag 270-MDEntryPx) and quantity (tag 271-MDEntrySize) for each bid (269=0) and ask (269=1) order now present in the order book.

Confirm quantities and prices on the book for the selected instrument
Instrument: 10Y-USD

BuyPrice	BuyQuantity	SellPrice	SellQuantity
0.0	0	0.0	0
0.0	0	0.0	0
0.0	0	0.0	0
0.0	0	0.0	0
0.0	0	0.0	0
0.0	0	0.0	0
0.0	0	0.0	0
0.0	0	0.0	0
0.0	0	0.0	0
0.0	0	0.0	0
0.0	0	0.0	0
0.0	0	0.0	0
0.0	0	0.0	0
0.0	0	0.0	0

Submit

¹Tag 35=X Tag 269=J

Channel Reset

This test verifies that your application can properly receive and process book reset messages in order to recover all books on the channel.

Note: This test is mandatory for all customers.

Current Testing Configuration

Company Name: QA

System Profile: DEV_TEST_PROFILE - Automated Trading System 1.0

SenderComp: P09725 ERIS SIGR

Tester: test user1

TestSuite: Eris Exchange

Test Suite Status:

Pre-Certification Interview: ✔ Complete

Test Suite Status: ▶ In Progress

[Eris Exchange Online Help](#)

Interview

Test Suite

Test Case

Post Certification

Steps of the test: Channel Reset for ERIS Instruments

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 step 1.

Purpose

The purpose of this test is to verify that your application can properly receive and process book reset messages in order to recover the book.

Selected Contract: 10Y-USD-724 Unlock

Category	IP	Port
Incremental Feed A	239.43.100.26	15627
Incremental Feed B	239.43.100.26	15628
TCP Replay	172.16.32.231	20029

Note: Press the Start Test button to start or restart a Test. Please do not press the Start Test button again if you are currently running this test.

START TEST

Description	Status
1 Confirm books are empty for the selected instrument.	●
2 Receive market data for a set of orders.	●
3 Confirm quantities and prices on the book for the selected instrument.	●
4 Receive Channel reset message with 269=J.	●
5 Receive resent book with report sequence number reset to 1.	●
6 Confirm quantities and prices on the book for the selected instrument.	●

Keys: ● not tested ● complete ● pending ● failed

REFRESH

▶ To run the Channel Reset test:

1. From the **Contract** drop-down, select the desired contract if the contract is not already locked.
2. Click the **"START TEST"** button.

Note: DO NOT select the "START TEST" button once the test is in progress.

3. Confirm that the book is empty.
4. Receive market data for a set of orders.
5. Confirm the quantities and prices on the book.

Enter the price (tag 270-MDEntryPx) and quantity (tag 271-MDEntrySize) for each bid (269=0) and ask (269=1) order now present in the order book.

Confirm quantities and prices on the book for the selected instrument.
Instrument: 10Y-USD

BuyPrice	BuyQuantity	SellPrice	SellQuantity
0.0	0	0.0	0
0.0	0	0.0	0
0.0	0	0.0	0
0.0	0	0.0	0
0.0	0	0.0	0
0.0	0	0.0	0
0.0	0	0.0	0
0.0	0	0.0	0
0.0	0	0.0	0

3

Submit

- 6. Receive a [Channel Reset¹](#) message.
- 7. Receive the resent book.

Note: Tag 83-RptSeq should be set to 1.

- 8. Confirm the quantities and prices on the book.
Enter the price (tag 270-MDEntryPx) and quantity (tag 271-MDEntrySize) for each bid (269=0) and ask (269=1) order now present in the order book.

¹tag 35=X tag 269=J

Request for Quote

This test verifies that your application can properly receive and process Request for Quote messages.

Note: If you answered "Yes" to the question, "Does your system support RFQ (Request for Quote) Messages?" in the [Interview](#), then this test is mandatory. If you answered "No," then this test is optional.

Current Testing Configuration

Company Name: <input type="text" value="QA"/>	Tester: <input type="text" value="test user1"/>
System Profile: <input type="text" value="DEV_TEST_PROFILE - Automated Trading System 1.0"/>	TestSuite: <input type="text" value="Eris Exchange"/>
SenderComp: <input type="text" value="PD9725"/> <input type="text" value="UNASSIGN"/>	

Test Suite Status:
 Pre-Certification Interview: ✔ Complete
 Test Suite Status: ▶ In Progress
[Eris Exchange Online Help](#)

Interview
Test Suite
Test Case
Post Certification

Steps of the test: Request For Quote Message for ERIS Instruments

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 step 1.

Purpose
The purpose of this test is to verify that your application can properly receive and process Request for Quote messages.

Selected Contract: 10V-USD - 724

Category	IP	Port
Incremental Feed A	239.43.100.26	15627
Incremental Feed B	239.43.100.26	15628
TCP Replay	172.16.32.231	20029

Note: Press the Start Test button to start or restart a Test. Please do not press the Start Test button again if you are currently running this test.

Description	Status
1 Confirm that your application successfully received and processed RFQ message.	●

Key: ● not tested ● complete ● pending ● failed

▶ To complete the Request for Quote test:

1. From the **Contract** drop-down, select the desired contract if the contract is not already locked.
2. Click the "START TEST" button.

Note: DO NOT select the "START TEST" button once the test is in progress.

3. Confirm that an [RFQ](#) message was received.

Enter the values from the following tags:

- tag 55-Symbol
- tag 1151-SecurityGroup
- tag 537-QuoteType
- tag 38-OrderQty

Description	Status
1 Confirm that your application successfully received and processed RFQ message. Symbol: <input type="text"/> SecurityGroup: <input type="text"/> QuoteType: <input type="text"/> OrderQty: <input type="text"/> <input type="button" value="Submit"/>	●