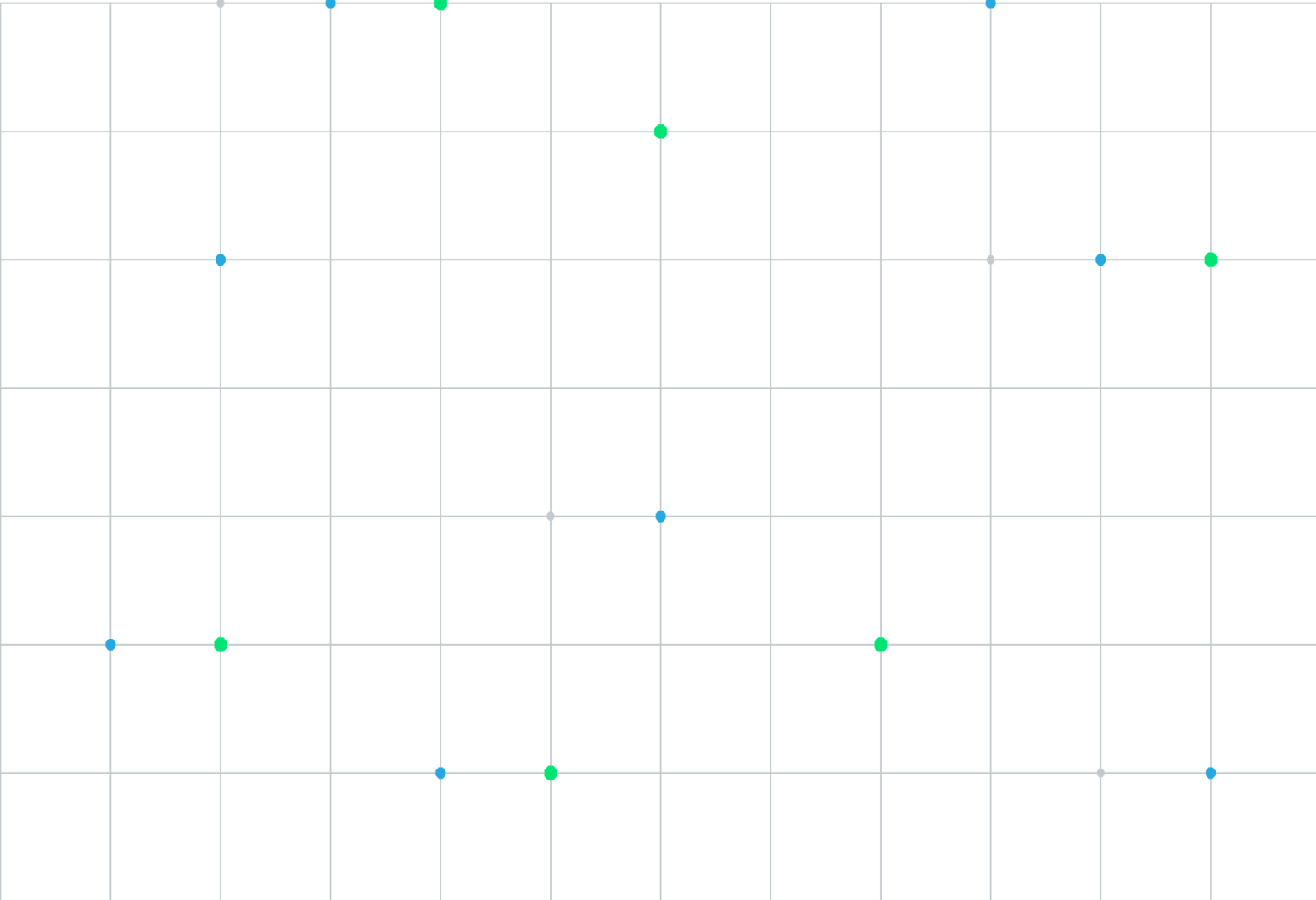


AutoCert+ Streamlined SBE OTC End of Day User Manual

28 October 2022



Neither futures trading nor swaps trading are suitable for all investors, and each involves the risk of loss. Swaps trading should only be undertaken by investors who are Eligible Contract Participants (ECPs) within the meaning of Section 1a(18) of the Commodity Exchange Act. Futures and swaps each are leveraged investments and, because only a percentage of a contract's value is required to trade, it is possible to lose more than the amount of money deposited for either a futures or swaps position. Therefore, traders should only use funds that they can afford to lose without affecting their lifestyles and only a portion of those funds should be devoted to any one trade because traders cannot expect to profit on every trade. All examples discussed are hypothetical situations, used for explanation purposes only, and should not be considered investment advice or the results of actual market experience.

CME Group, the Globe Logo and CME are trademarks of Chicago Mercantile Exchange Inc. CBOT is a trademark of the Board of Trade of the City of Chicago, Inc. NYMEX is a trademark of New York Mercantile Exchange, Inc. COMEX is a trademark of Commodity Exchange, Inc. All other trademarks are the property of their respective owners.

The information within this manual has been compiled by CME Group for general purposes only. CME Group assumes no responsibility for any errors or omissions. Additionally, all examples in this manual are hypothetical situations, used for explanation purposes only, and should not be considered investment advice or the results of actual market experience. All matters pertaining to rules and specifications herein are made subject to and are superseded by official CME, CBOT and NYMEX rules. Current rules should be consulted in all cases concerning contract specifications.

Copyright © 2023 CME Group Inc. All rights reserved.

Table of Contents

Getting Started	4
What's New	5
Interview	6
Certification Tests	7
Daily OTC Incremental Market Data Refresh (35=X) VOI	8
Daily OTC Incremental Market Data Refresh (35=X) Settlement	9
Recovery via TCP Replay	11
Price Precision Extension	13

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, CME Group provides a dedicated certification environment to allow customers to test their systems before they complete certification.

This Help system accompanies the AutoCert+ Streamlined SBE OTC End of Day test suite.

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+ Streamlined SBE OTC End of Day Help system.

Date	Topic	Description
28 Oct 2022	Format	Website and PDF format changes only.
15 Jun 2018	Price Precision Extension	Added new chapter.
14 Nov 2016		Initial release

Interview

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

After answering the Interview questions, click the **Complete** button.

The screenshot shows a web interface for the 'Interview' section. At the top, there is a navigation bar with four tabs: 'Interview' (highlighted in blue), 'Test Suite', 'Test Case', and 'Post Certification'. Below the tabs, the main content area contains two questions, each with a list of options that have been selected (indicated by checked checkboxes).

What types of Daily OTC Instruments will your system support?

- ☒ CDS
- ☒ Futures
- ☒ Forward

What types of Daily OTC asset classes will your system support?

- ☒ Credit
- ☒ Agriculture
- ☒ Energy
- ☒ Metals

At the bottom left of the form, there is an orange button labeled 'Complete'.

Certification Tests

The AutoCert+ Streamlined SBE OTC End of Day certification tests consist of the following:

- [Market Data Refresh \(35=X\) VOI](#)
- [Market Data Refresh \(35=X\) Settlement](#)
- [Recovery via TCP Replay](#)
- [Price Precision Extension](#)

Daily OTC Incremental Market Data Refresh (35=X) VOI

This test verifies that your application can properly receive and process Incremental Market Data Refresh (35=X) Cleared Volume and Open Interest messages for Daily OTC market data.

Steps of the test: Daily OTC Incremental Market Data Refresh (35=X) VOI

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 Incremental Market Data Refresh (35=X) Cleared Volume and Open Interest messages for Daily OTC market data.

Selected Contract : PRODTCC0048 - 747 **Unlock**

Category	IP	Port
Incremental Feed A	224.0.25.101	11681
Incremental Feed B	224.0.25.101	11781
TCP Replay	239.43.1.38	9681

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	Flag	Status
1 ACP sends the incremental market data refresh (35=X) Cleared Volume and Open Interest messages and requests customer to confirm prices for Daily OTC products. Date format should be entered as: YYYYMMDD		Not Tested

Key:  not tested  complete  pending  failed

REFRESH


To complete the Daily OTC Incremental Market Data Refresh (35=X) VOI test:





- From the Contracts drop-down, select the desired contract, if the contract is not already locked.
- Click **Start Test** to begin.



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

- Enter the following tag values to confirm that your application received the Incremental Market Data Refresh (35=X) messages with Cleared Volume and Open Interest prices for Daily OTC products.
 - tag 269-MDEntryType
 - tag 279-MDUpdateAction
 - tag 271-MDEntrySize
 - tag 272-MDEntryDate

Description	Flag	Status
1 ACP sends the incremental market data refresh (35=X) Cleared Volume and Open Interest messages and requests customer to confirm prices for Daily OTC products. Date format should be entered as: YYYYMMDD Open Interest - MDEntryType : <input type="text"/> Open Interest - MDUpdateAction : <input type="text"/> Open Interest - MDEntrySize : <input type="text"/> Open Interest - MDEntryDate : <input type="text"/> Cleared Volume - MDEntryType : <input type="text"/> Cleared Volume - MDUpdateAction : <input type="text"/> Cleared Volume - MDEntrySize : <input type="text"/> Cleared Volume - MDEntryDate : <input type="text"/> Submit		Pending

Key:  not tested  complete  pending  failed

REFRESH

Click **Submit**.

Daily OTC Incremental Market Data Refresh (35=X) Settlement

This test verifies that your application can properly receive and process Incremental Market Data Refresh (35=X) Settlement and Recovery Rate messages for Daily OTC market data.

Steps of the test: Daily OTC Incremental Market Data Refresh (35=X) Settlement Test

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 Incremental Market Data Refresh (35=X) Settlements and Recovery Rate messages for Daily OTC market data.

Selected Contract : PRODTCC0048 - 747 **Unlock**

Category	IP	Port
Incremental Feed A	224.0.25.101	11681
Incremental Feed B	224.0.25.101	11781
TCP Replay	239.43.1.38	9681

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	Flag	Status
1 ACP sends the incremental market data refresh (35=X) Settlement and Recovery Rate data blocks within the Incremental Market Data Refresh message for Daily OTC products. Date format should be entered as: YYYYMMDD		Not Tested

Keys:  not tested  complete  pending  failed

REFRESH

To complete the Daily OTC Incremental Market Data Refresh (35=X) Settlement test:

1. From the Contracts drop-down, select the desired contract, if the contract is not already locked.
2. Click **Start Test** to begin.



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

3. Enter the following tag values to confirm that your application received the Incremental Market Data Refresh (35=X) messages with Settlement and Recovery Rate data blocks for Daily OTC products.
 - tag 64-SettleDate
 - tag 269-MDEntryType
 - tag 279-MDUpdateAction
 - tag 270-MDEntryPx
 - tag 272-MDEntryDate
 - tag 276-QuoteCondition
 - tag 423-PriceType

Description		Flag	Status
1	ACP sends the incremental market data refresh (35=X) Settlement and Recovery Rate data blocks within the Incremental Market Data Refresh message for Daily OTC products. Date format should be entered as: YYYYMMDD		
	Recovery Rate - MDEntryType :		
	Recovery Rate - MDUpdateAction :		
	Recovery Rate - MDEntryPx :		
	Recovery Rate - MDEntryDate :		
	Recovery Rate - PriceType :		
	Settlement Price (PriceType = 6) - MDEntryType :		
	Settlement Price (PriceType = 6) - MDEntryPx :		
	Settlement Price (PriceType = 6) - SettleDate :		
	Settlement Price (PriceType = 6) - QuoteCondition :		
	Settlement Price (PriceType = 1) - MDEntryType :		
	Settlement Price (PriceType = 1) - MDEntryPx :		
	Settlement Price (PriceType = 1) - SettleDate :		
	Settlement Price (PriceType = 1) - QuoteCondition :		
<div>Submit</div>		<div></div>	Pending

Key: not tested complete pending failed

REFRESH

Click **Submit**.

Recovery via TCP Replay

This test verifies your application can perform a recovery via TCP Replay for Daily OTC market data.

Steps of the test: Recovery via TCP Replay

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 via TCP Replay for Daily OTC market data

Selected Contract : CAORXU 202009 1 - 747

Unlock

Category	IP	Port
Incremental Feed A	224.0.25.101	11681
Incremental Feed B	224.0.25.101	11781
TCP Replay	239.43.1.38	9015

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	Flag	Status
1 AutoCert+ sends Message updates, then create a gap to be recovered.		Not Tested
2 Customer Establishes a TCP Connection and submits a Logon message.		Not Tested
3 Receive a logon confirmation message.		Not Tested
4 Submit a Market Data Request (35=V) message.		Not Tested
5 Confirm that your application successfully received the Streamlined SBE recovery message that was requested in the Market Data Request Message:		Not Tested
6 Receive and process Logout		Not Tested

Key: not tested complete pending failed


REFRESH

To complete the Recovery via TCP Replay test:

1. From the Contracts drop-down, select the desired contract, if the contract is not already locked.
2. Click **Start Test** to begin.

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

3. AutoCert+ sends message updates, then creates a gap to be recovered.
4. Establish a TCP connection and submit a Logon message.
5. Select **Yes** or **No** to indicate whether or not your application received a Logon confirmation message.
6. Submit a Market Data Request (35=V) message.
7. Enter the following tag values to confirm that your application received the Streamlined SBE recovery messages requested in the Market Data Request message received:
 - tag 269-MDEntryType
 - tag 279-MDUpdateAction

5	<p>Confirm that your application successfully received the Streamlined SBE recovery message that was requested in the Market Data Request Message:</p> <p>MDEntryType : <input type="text"/></p> <p>MDUpdateAction : <input type="text"/></p> <p><input type="button" value="Submit"/></p>		Pending
---	--	---	---------

Click **Submit**.

8. Receive and process the Logout message.

Price Precision Extension

This test validates that your system has adopted the new template and can support a price with up to 8 decimal precision.

Interview
Test Suite
Test Case
Post Certification
Help

Steps of the test: Price Precision Extension

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 the client system has adopted the new template and can support a price up to 8 decimal precision

Selected Contract : Q108 - 696 **Unlock**

Category	IP	Port
Incremental Feed A	224.0.25.101	11681
Incremental Feed B	224.0.25.101	11781
Snapshot MBP	NA	NA
Snapshot MBO	NA	NA
TCP Replay	239.43.1.38	9681

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	Flag	Status
1 Confirm that your application successfully received and processed the incremental market data refresh (35=X) message for Daily OTC Settlement		Not Tested
2 Confirm that your application successfully received and processed the incremental market data refresh (35=X) message for Daily OTC Settlement		Not Tested
3 Do your downstream systems correctly process the expanded price precision?		Not Tested

Key: not tested complete pending failed

To run the Price Precision Extension test:

- Click **START TEST** to begin.

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

- Enter the tag 270-MDEntryPx value to confirm that your system successfully received and processed the Market Data Incremental Refresh (35=X) message for Daily OTC Settlements.

Description	Flag	Status
1 Confirm that your application successfully received and processed the incremental market data refresh (35=X) message for Daily OTC Settlement MDEntryPx : <input type="text"/> Submit		Pending

Click **Submit**.

- Enter the tag 270-MDEntryPx value to confirm that your system successfully received and processed the Market Data Incremental Refresh (35=X) message for Daily OTC Settlements.

2 Confirm that your application successfully received and processed the incremental market data refresh (35=X) message for Daily OTC Settlement MDEntryPx : <input type="text"/> Submit		Pending
--	--	---------

Click **Submit**.

- Click **Yes** or **No** to indicate whether or not your downstream systems correctly process the expanded price precision.