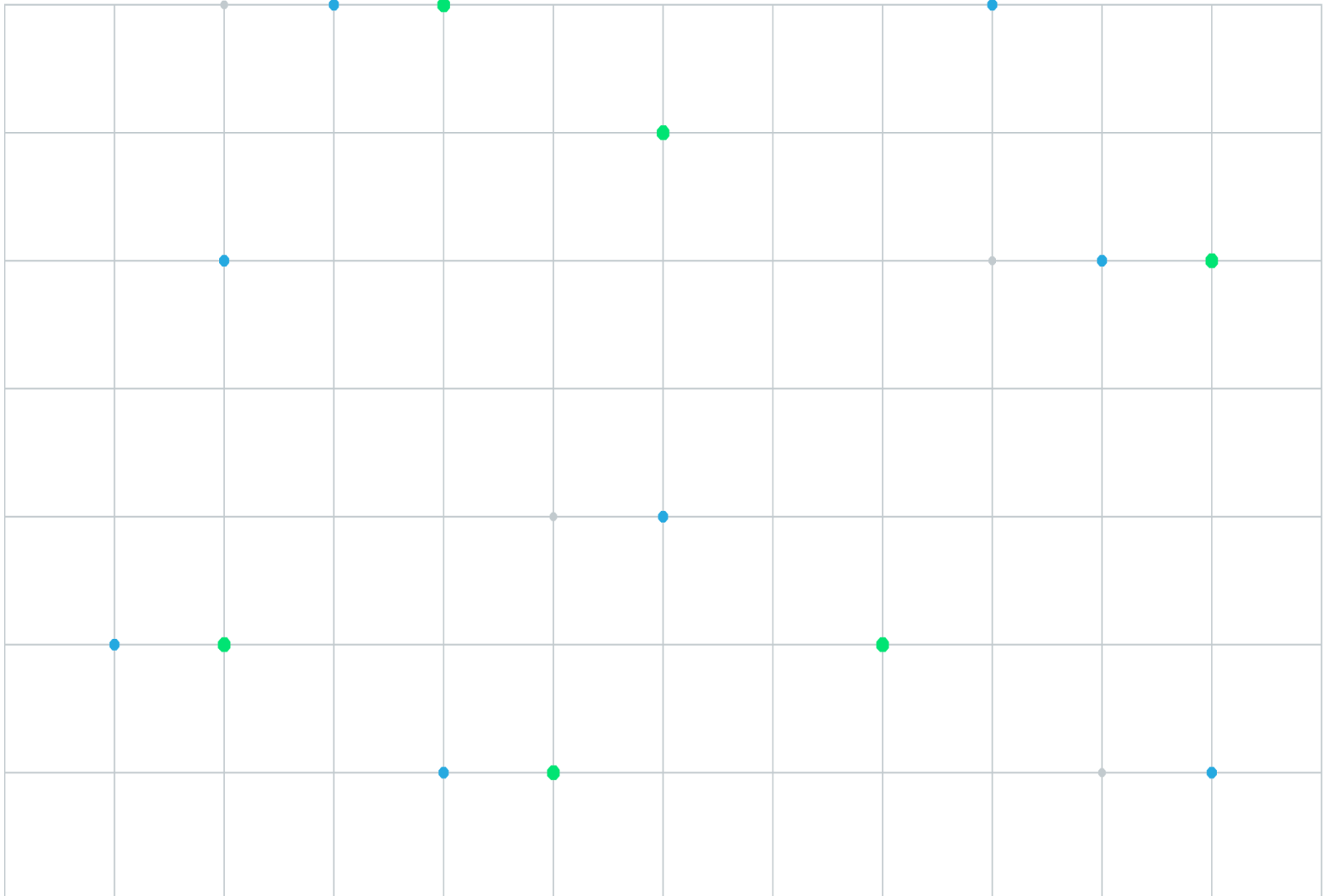


AutoCert+ Streamlined SBE Settlements and Statistics User Manual

24 Nov 2020



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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.

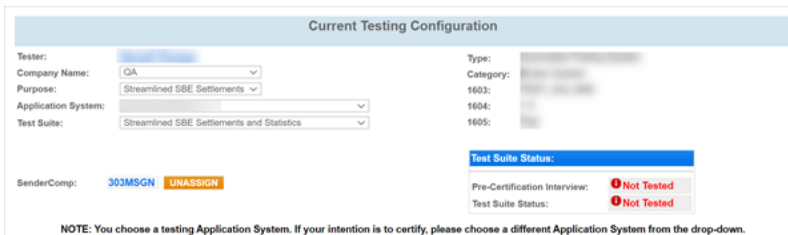
To facilitate the process of connecting a customer application, CME Group provides a dedicated certification environment to allow customers to test their systems before they complete certification.

This user manual accompanies the AutoCert+ Streamlined SBE Settlements and Statistics test suite.

Running and Navigating AutoCert+

▶ **To run and navigate AutoCert+:**

1. [Log into](#) the automated certification tool.
2. Review general AutoCert+ test suite [navigation](#) and [general interview](#) information.
3. Navigate to the AutoCert+ Streamlined SBE Settlements and Statistics test suite:



- a. Select a Company Name.
 - b. From the Purpose drop-down, select "Streamlined SBE Settlements."
 - c. Select an Application System
 - d. From the Test Suite drop-down, select "Streamlined SBE Settlements and Statistics."
4. Complete the [Interview](#) for this test suite.
 5. Complete the applicable test cases.
 6. Complete the certification process from the [Post Certification](#) tab.

What's New

The list below illustrates the updates made to the AutoCert+ Streamlined SBE Settlements and Statistics Help system.

Date	Author	Topic(s)	Description
24 Nov 2020	DT	All	Initial release

Interview

You must complete the pre-certification interview before running the test case.

Select your company type and click the **Complete** button.

The screenshot shows a web interface for a pre-certification interview. At the top, there is a navigation bar with tabs: Interview (selected), Test Suite, Test Case, Post Certification, and Help. Below the navigation bar, there are three sections of questions:

- Which of the following connection type does your application use?**
 - CME SBE UDP Multicast
 - CME Smart Stream on GCP SBE
- What types of Instruments will your system support for Settlements and Statistics?**
 - Futures
 - Options
 - Forwards
- What types of price format will your system support?**
 - Globex Price (tag 270-MDEntryPX)
 - Clearing Price (tag 9732-FormattedLastPx)

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

Statistic Messages

This test verifies that your application can properly process statistics received in Market Data Incremental Refresh (tag 35 - MsgType=X) for Settlement and Statistics messages.

The screenshot shows the 'Statistic Messages' test configuration page. It includes a 'Purpose' section, a 'Selected Contract' section with a table of contract details, a 'Note' about starting the test, and a table of test steps. A 'REFRESH' button is visible at the bottom left.

Category	IP	Port
Incremental Feed A	224.0.25.101	11692
Incremental Feed B	224.0.25.101	11792
Snapshot MBP	NA	NA
Snapshot MBO	NA	NA
TCP Replay	10.210.126.221	9672

Description	Flag	Status
1 Cleared Volume and Open Interest statistics were sent. Please validate the following values.	<input type="radio"/>	Not Tested
2 End of Day Session High/Low prices were sent. Please validate the following values.	<input type="radio"/>	Not Tested
3 A settlement price was sent. Please validate the following values.	<input type="radio"/>	Not Tested

▶ To run the Statistic Messages test

1. Click **START TEST**.
2. Click **REFRESH**.

Note: To restart the test, click **START TEST** and then click **REFRESH**.

3. Enter the following values for the Cleared Volume and Open Interest statistics that were sent.

1	Cleared Volume and Open Interest statistics were sent. Please validate the following values. Cleared Volume Qty (tag 5791-ClearedVolume): <input type="text"/> Open Interest Qty (tag 5792-OpenInterestQty): <input type="text"/> <input type="button" value="Submit"/>	<input type="radio"/>	Pending
---	--	-----------------------	---------

- Cleared Volume Quantity (tag 5791-ClearedVolume)
- Open Interest Quantity (tag 5792-OpenInterestQty)

4. Enter the following values for the End of Day Session High/Low prices that were sent.

2	End of Day Session High/Low prices were sent. Please validate the following values. High Price (tag 332-HighPx): <input type="text"/> Low Price (tag 333-LowPx): <input type="text"/> <input type="button" value="Submit"/>	<input type="radio"/>	Pending
---	--	-----------------------	---------

- High Price (tag 332-HighPx)
- Low Price (tag 333-LowPx)

5. Enter the following values for the settlement price that was sent.

- Globex Price (tag 270-MDEntryPx)
- Clearing Price (tag 9732-FormattedLastPx)
- Settlement (tag 731-SettlPriceType)

- a. Final Actual Settlement at Trading Tick
- b. Final Actual Settlement at Clearing Tick
- c. Final Actual Cabinet Settlement at Clearing Tick
- d. Preliminary Actual Settlement at Trading Tick

Recovery via TCP Replay for Settlements and Statistics Messages

This test verifies that your application can perform recovery via [TCP Replay](#) for Settlement and Statistics messages.

Steps of the test: Recovery via TCP Replay for Settlements and Statistics 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 step 1.

Purpose
The purpose of this test is to verify that your application can perform recovery via TCP Replay for Settlement and Statistics Messages.

Description	Flag	Status
1 AutoCert+ sends Market Data book updates, then creates a gap to be recovered.	●	Complete
2 Establish a TCP Connection and submit a Logon message using your AutoCert+ credentials.	●	Complete
3 Receive a logon confirmation message.	●	Complete
4 Submit a Market Data Request message.	●	Complete
5 Confirm that your application successfully received the Streamlined SBE Settlements and Statistics message that was requested in the Market Data Request Message.	●	Complete
6 Receive and process Logout	●	Complete

Key: @ not tested ● complete ● pending ● failed

REFRESH

▶ To run the Recovery via TCP Replay for Settlements and Statistics Messages test

1. Click **START TEST**.
2. Click **REFRESH**.

Note: To restart the test, click **START TEST** and then click **REFRESH**.

3. Receive market data book updates with a gap that needs to be recovered.
4. Establish a TCP connection and submit a Logon message using your AutoCert+ credentials..
5. Receive a Logon confirmation message.
6. Submit a Market Data Replay Request message
7. Enter the following tag values to confirm that your application successfully received the Streamlined SBE Settlements and Statistics message that was requested in the Market Data Request message:
 - tag 270-MDEntryPX
 - tag 9732-FormattedLastPx
3. Receive and process a Logout message.