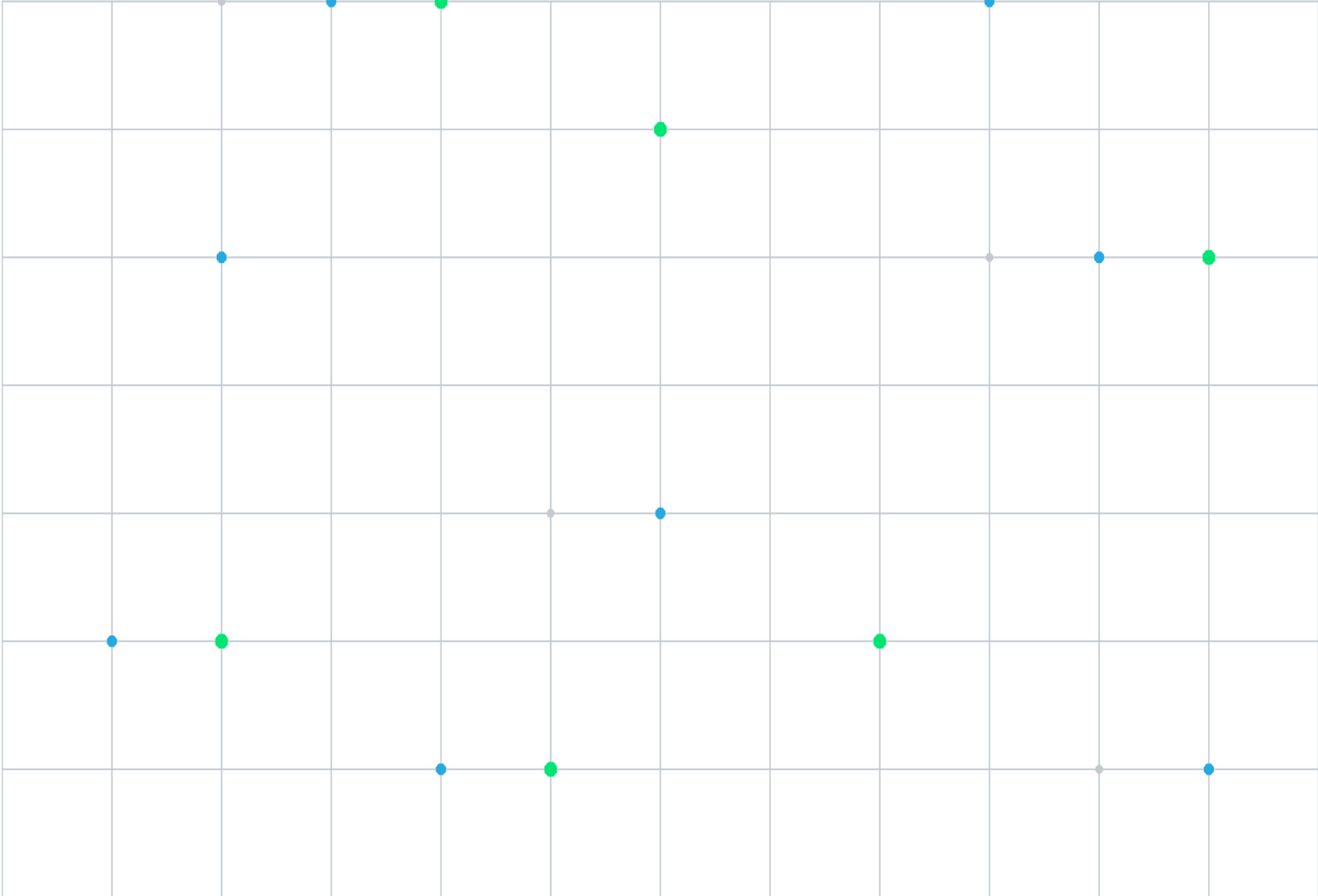


AutoCert+ CME Benchmark Administration Premium User Manual

October 25, 2022



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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 Help system accompanies the AutoCert+ CME Benchmark Administration Premium test suite.

 **To use AutoCert+ and select a Test Suite:**

1. [Log into](#) the automated certification tool.
2. Review general AutoCert+ test suite [navigation](#) and [general interview](#) information.
3. Navigate to the AutoCert+ CME Benchmark Administration Premium test suite.



Identifier:

- a. Select a **Company Name**.
 - b. For **Market**, select *Futures and Options*.
 - c. For **Purpose**, select *Streamlined*.
 - d. Select an **Application System**.
 - e. For **Test Suite**, select *CME Benchmark Administration Premium*.
4. Select a **Identifier** and select **ASSIGN**.
 5. Complete the [Interview](#) for this test suite.
 6. Complete applicable test cases.
 7. Complete the certification process from the [Post Certification](#) tab.

What's New

The list below illustrates the updates made to the AutoCert+ CME Benchmark Administration Premium Help system.

Date	Topic	Description
October 25, 2022	Format	Website and PDF format changes only.
April 29, 2022	Interview	Updated for new CVOL test case
	Incremental Message for CVOL	New test case
August 30, 2021	Interview	Updated for new index pricing test case.
	Incremental Message for Index Pricing	Added new topic.
June 4, 2021		Initial publication.

Interview

Based on your response, certain tests are required and others are optional. You must complete the pre-certification interview before running the test cases.

▶ **To complete the interview:**

1. Select an **Identifier** from the drop-down and select **ASSIGN**.

Identifier:

2. Answer each question and select **Complete**.

Interview | Test Suite | Test Case | Post Certification | Help

Which of the following connection type does your application use?

- CME SBE UDP Multicast
- CME Smart Stream on GCP SBE

Which pricing does your application support?

- CME Term SOFR Reference Rates
- Petroleum Index
- CME Group Volatility Index (CVOLTM)

TCP Replay Recovery

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

Note: See the [CME Benchmark Administration Premium message specification](#).

1. Select an **Identifier** in the drop-down.
2. Select **Assign**.
3. From the **Contract** drop-down, choose the desired contract and click **Select**.

Steps of the test: TCP Replay Recovery

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 recovery via TCP Replay.

Selected Contract: TR1250 - 671 **Unlock**

Category	IP	Port
Incremental Feed A	224.0.25.101	11671
Incremental Feed B	224.0.25.101	11771
Snapshot MBP	NA	NA
Snapshot MBO	NA	NA
TCP Replay	69.50.112.192	9671

Category	Link
Templates File:	templates_FixBinary.xml
Configuration File:	config.xml
Global TCP Recovery Schema:	Tcporecovery.xml

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 incremental updates then creates a gap to be recovered.	⊙	Not Tested
2 Establish a TCP connection and submit a Logon message. Was TCP connection established and logon message submitted successfully?	⊙	Not Tested
3 Receive a Logon Confirmation message. Was Logon confirmation message received?	⊙	Not Tested
4 Submit a Market Data Replay Request message.	⊙	Not Tested
5 Confirm that your application successfully received the Replay message that was requested in the Market Data Request Message.	⊙	Not Tested
6 Receive and process a Logout message.	⊙	Not Tested

Key: ⊙ not tested ● complete ● pending ● failed

REFRESH

To run a TCP Replay Recovery test:

1. AutoCert+ sends incremental updates then creates a gap to be recovered.
2. Establish a TCP connection and submit a Logon message. Was a TCP connection established and logon message submitted successfully?
3. Receive a Logon confirmation message. Was a Logon confirmation message received?
4. Submit a Market Data Replay Request message.
5. Enter the following tag values to confirm that your application successfully received the Replay message that was requested in the Market Data Request Message:
 - tag 270-MDEntryPx
 - tag 9732-FormattedLastPx

6. Receive and process a Logout message.

CME Benchmark Administration Premium Incremental Message

The purpose of this test is to verify that your application can properly receive and process CME Benchmark Administration Premium Market Data Incremental Refresh (tag 35-MsgType=X) messages.

Note: See the [CME Benchmark Administration Premium message specification](#).

1. Select an **Identifier** in the drop-down.
2. Select **Assign**.
3. From the **Contract** drop-down, choose the desired contract and click **Select**.

The screenshot shows the 'Test Case' configuration page for the 'CME Benchmark Administration Premium Incremental Message' test. The page includes a navigation bar with tabs for 'Interview', 'Test Suite', 'Test Case', 'Post Certification', and 'Help'. Below the navigation bar, the test title is displayed. A warning message states: '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.' The 'Purpose' section explains the test's goal. A 'Contracts' section features a dropdown menu labeled 'Select Contract - Channel' and a 'Select' button. A table below shows the test step details, including a description, a flag, and a status. A 'REFRESH' button is located at the bottom left, and a key for status indicators is at the bottom right.

Description	Flag	Status
1 A CME Term SOFR Reference Rates price was sent. Please validate the following values.		Not Tested

Key: not tested complete pending failed

▶ To run a CME Benchmark Administration Premium Incremental Message test:

1. Enter the following [tag values](#) to confirm that your system received a CME Term SOFR Reference Rates price:
 - tag 270-MDEntryPx
 - tag 9732-FormattedLastPx

CME Benchmark Administration Premium Incremental Message for Index Pricing

The purpose of this test is to verify that your application can properly receive and process CME Benchmark Administration Premium Market Data Incremental Refresh (tag 35-MsgType=X) messages for index pricing.

Note: See the [CME Benchmark Administration Premium message specification](#).

1. Select an **Identifier** in the drop-down.
2. Select **Assign**.
3. From the **Contract** drop-down, choose the desired contract and click **Select**.

The screenshot shows a web interface for configuring a test. At the top, there are tabs: Interview, Test Suite, Test Case (selected), Post Certification, and Help. Below the tabs, the title is "Steps of the test: CME Benchmark Administration Premium Incremental Message for Index Pricing". A warning message states: "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." Under the "Purpose" section, it says: "The purpose of this test is to verify that your application can properly receive and process CME Benchmark Administration Premium incremental messages (tag 35-MsgType=X)." There is a "Contracts:" label followed by a dropdown menu showing "Select Contract - Channel" and a "Select" button. Below this is a table with columns "Description", "Flag", and "Status". The table contains one row: "1 | An Index price was sent. Please validate the following values." | [Flag icon] | Not Tested". At the bottom left is a "REFRESH" button. At the bottom right is a key: "Key: [not tested icon] not tested [complete icon] complete [pending icon] pending [failed icon] failed".

▶ To run a CME Benchmark Administration Premium Incremental Message for Index Pricing test:

1. Enter the following [tag values](#) to confirm that your system received an index price:
 - tag 269-MDEntryType
 - tag 270-MDEntryPx
 - tag 9732-FormattedLastPx

CME Benchmark Administration Premium Incremental Message for CVOL

The purpose of this test is to verify that your application can properly receive and process CME Benchmark Administration Premium incremental messages (tag 35-MsgType=X) for CME Group Volatility Index ([CVOL™](#)).

Note: See the [CME Benchmark Administration Premium message specification](#)

To select the Identifier and Instrument to test:

1. Select an **Identifier** in the drop-down, then click **ASSIGN**.

The instrument drop-down appears.

2. Select an **Instrument(s)**, then click **Select**.

Additional testing information appears below the selected instrument.

3. Select **START TEST**, then proceed to the test procedures (below).

Identifier: ASSIGN

Test Suite Status:

Pre-Certification Interview: ✔ Complete

Test Suite Status: In Progress

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

Steps of the test: CME Benchmark Administration Premium Incremental Message for CVOL

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 CME Benchmark Administration Premium incremental messages (tag 35-MsgType=X).

Please assign a Identifier and make sure a valid instrument is selected to start certifying a test.

Description	Flag	Status
<div style="display: flex; align-items: flex-start;"> <div style="width: 20px; text-align: center; border-right: 1px solid #ccc;">1</div> <div style="padding-left: 5px;"> <p>A CVOL price was sent. Please validate the following values for the first repeating group received.</p> <p>MDEntryType : <input type="text"/></p> <p>MDEntryPx : <input type="text"/></p> <p>OpenCloseSettlFlag : <input type="text" value="Reprint Previous"/></p> <p style="margin-top: 5px;">Submit</p> </div> </div>	<div style="width: 15px; height: 15px; background-color: yellow; border-radius: 50%; margin: 0 auto;"></div>	Pending

Key: ● not tested ● complete ● pending ● failed

REFRESH

To run a CME Benchmark Administration Premium Incremental Message (for CVOL) test:

1. Enter the following [tag values](#) to confirm that your system received an index price:
 - tag 269-MDEntryType
 - tag 270-MDEntryPx
 - Select an applicable tag 286-OpenCloseSettlFlag: (Reprint Previous, Real Time, Final Daily or Preliminary Daily).