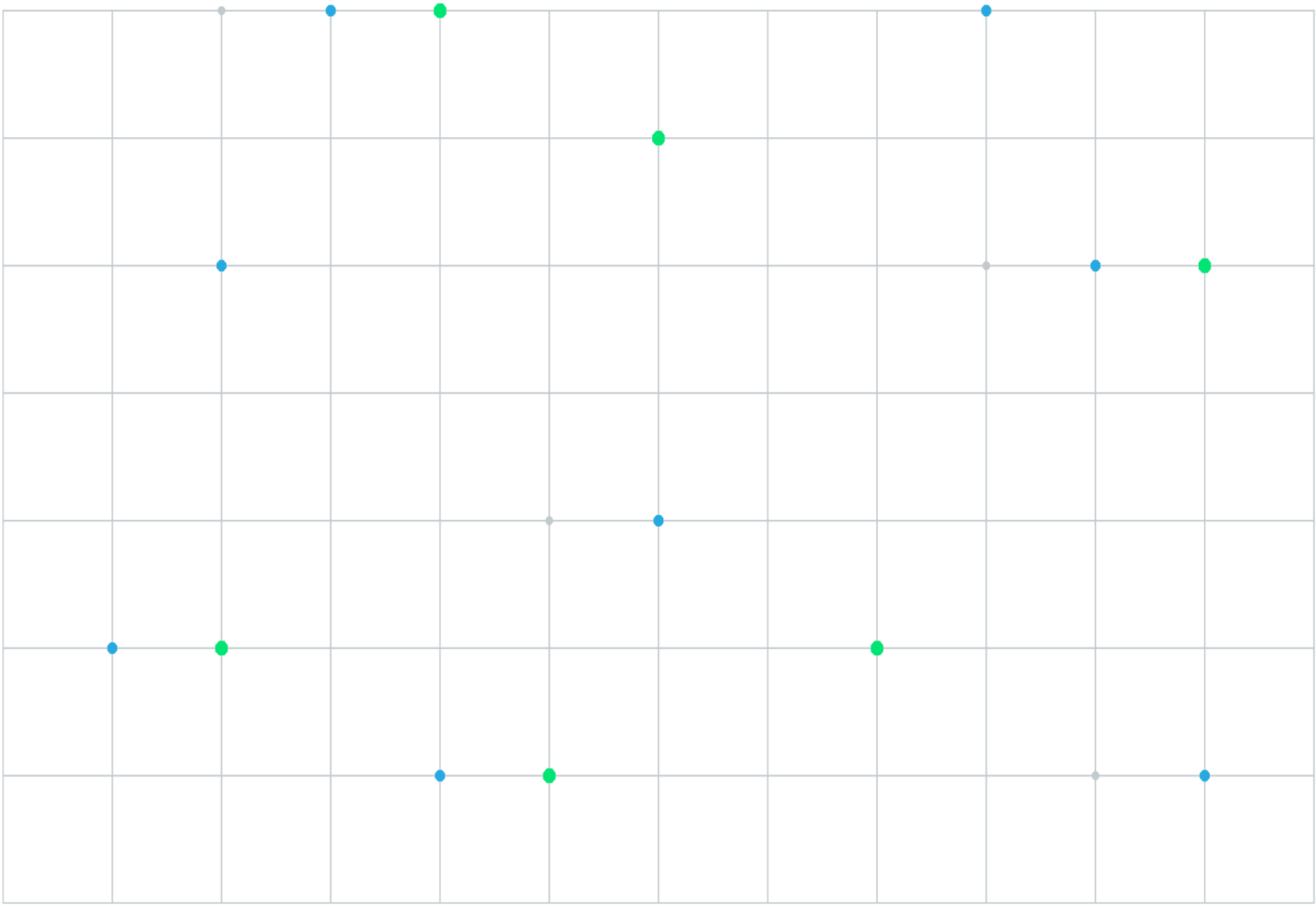
AutoCert+ CME Benchmark Administration Premium
User Manual

January 23, 2024



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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.

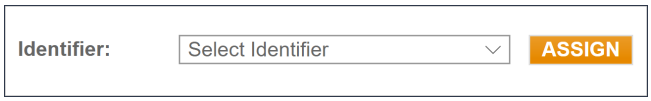
To facilitate the process of connecting a customer application, CME Group provides a dedicated certification environment to allow customers to test their systems before they complete certification.

This Help system accompanies the AutoCert+ CME Benchmark Administration Premium test suite. CME Benchmark Administration Premium is a Simple Binary Encoded (SBE) market data topic on CME Smart Stream on Google Cloud Platform (GCP) for:

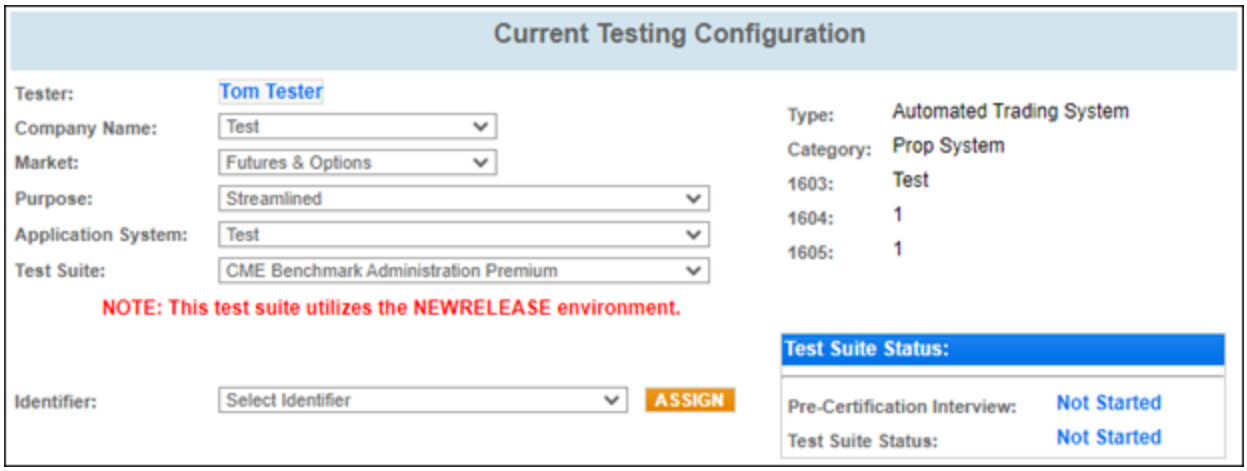
- CME Term SOFR Reference Rates
- Petroleum Indexes
- CVOL Indexes
- RFR Benchmarks

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.



   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
January 23, 2024	Incremental Message for RepoFunds Rate Benchmark	Repo Funds Rate Benchmark instrument tests added
January 23, 2024	Interview	Added questions for RFR benchmark tests
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.

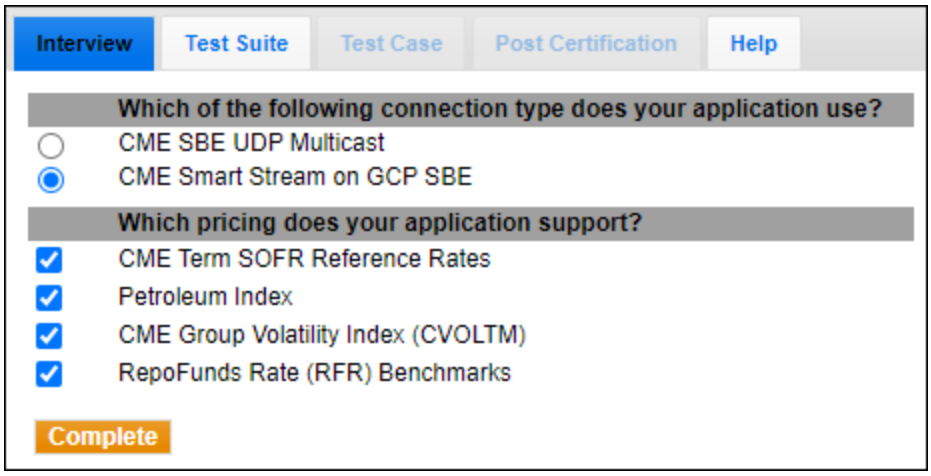
Interview

Based on your response, certain tests are required and others are optional. Before running the test cases, the pre-certification interview must be completed.

To complete the interview:

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

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



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 also:
- CME Group Benchmark Administration
- CME Benchmark Administration Premium Message Specification

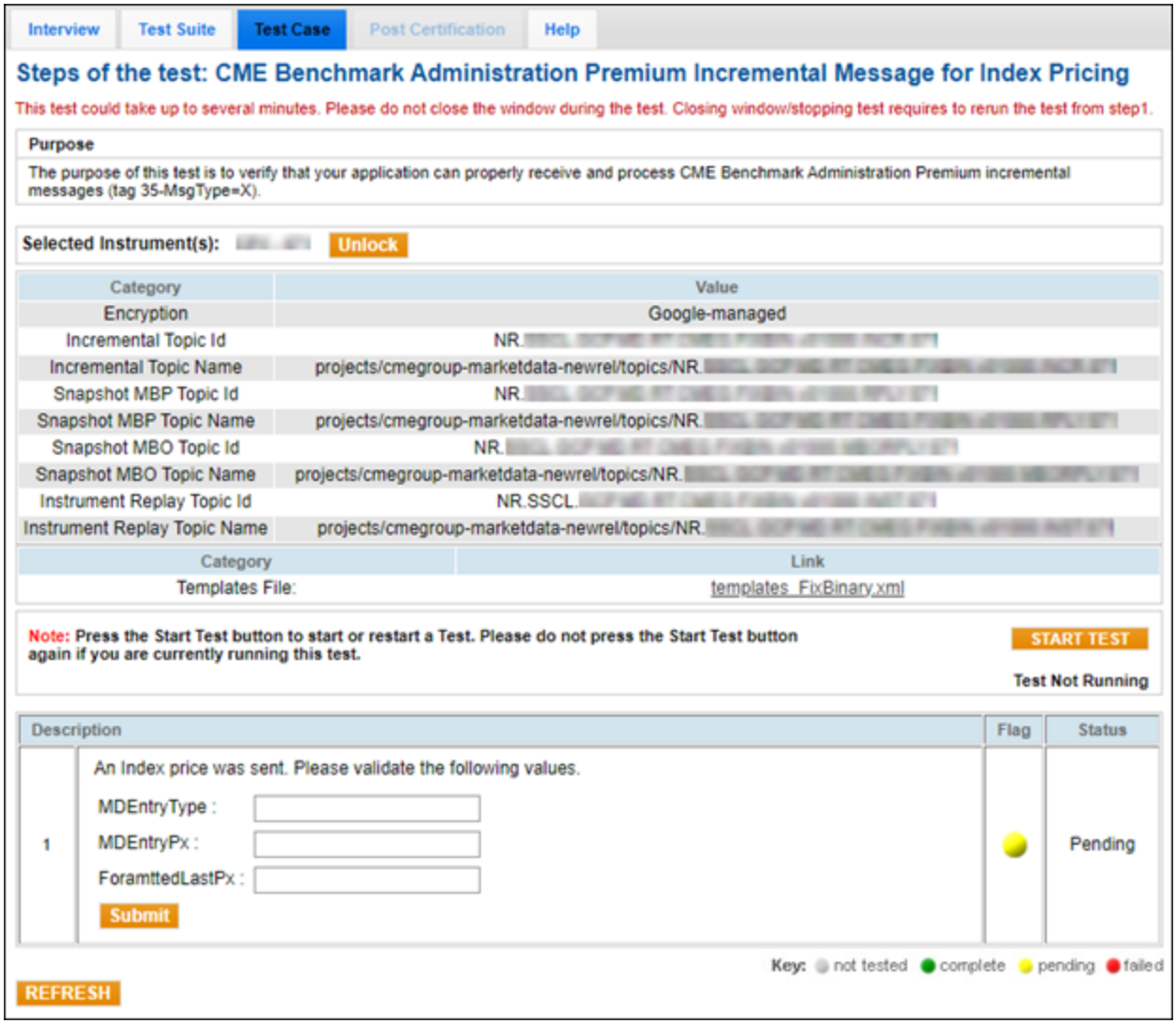
Prior to beginning the test, select:

1. From the Testing Configuration screen, select an **Identifier**, then select **Assign**.
2. On the selected Test Case screen, select an **Instrument**, then select **START TEST**.

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

AutoCert+ sends an index price, enter the following tag values to confirm 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 also:
- CME Group Benchmark Administration
- CME Benchmark Administration Premium Message Specification

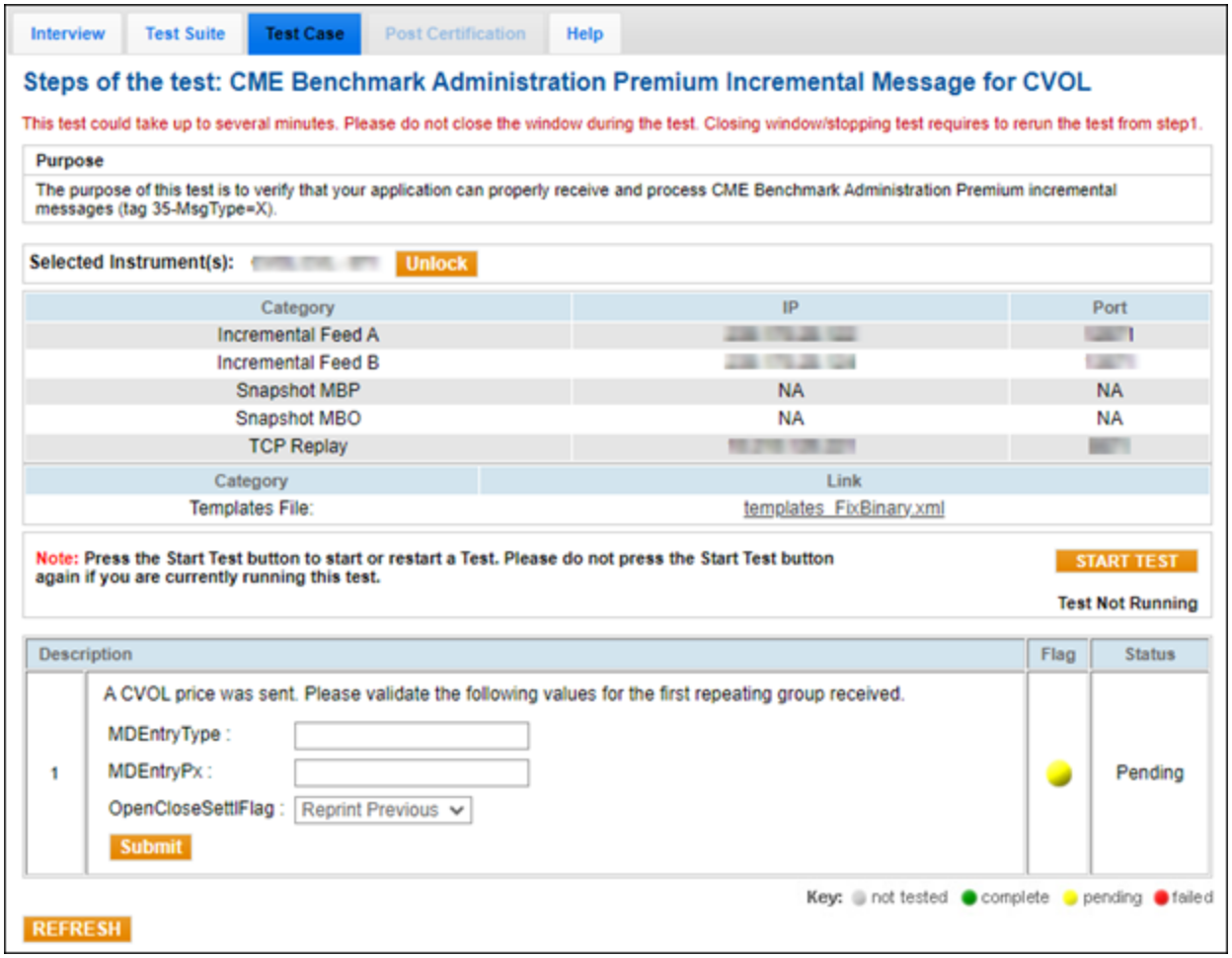
Prior to beginning the test, select:

1. From the Testing Configuration screen, select an **Identifier**, then select **Assign**.
2. On the selected Test Case screen, select an **Instrument**, then select **START TEST**.

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

AutoCert+ sends a CVOL price. Validate the following values for the first repeating group received.

- tag 269-MDEntryType
- tag 270-MDEntryPx
- Select an applicable tag 286-OpenCloseSettlFlag:
  - 107=Real Time
  - 108=Final Daily
  - 109=Preliminary Daily
  - 110=Reprint Previous



TCP Replay Recovery

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

> **Note:** See also:
> - CME Group Benchmark Administration
> - MDP 3.0 - TCP Recovery

Prior to beginning the test, select:

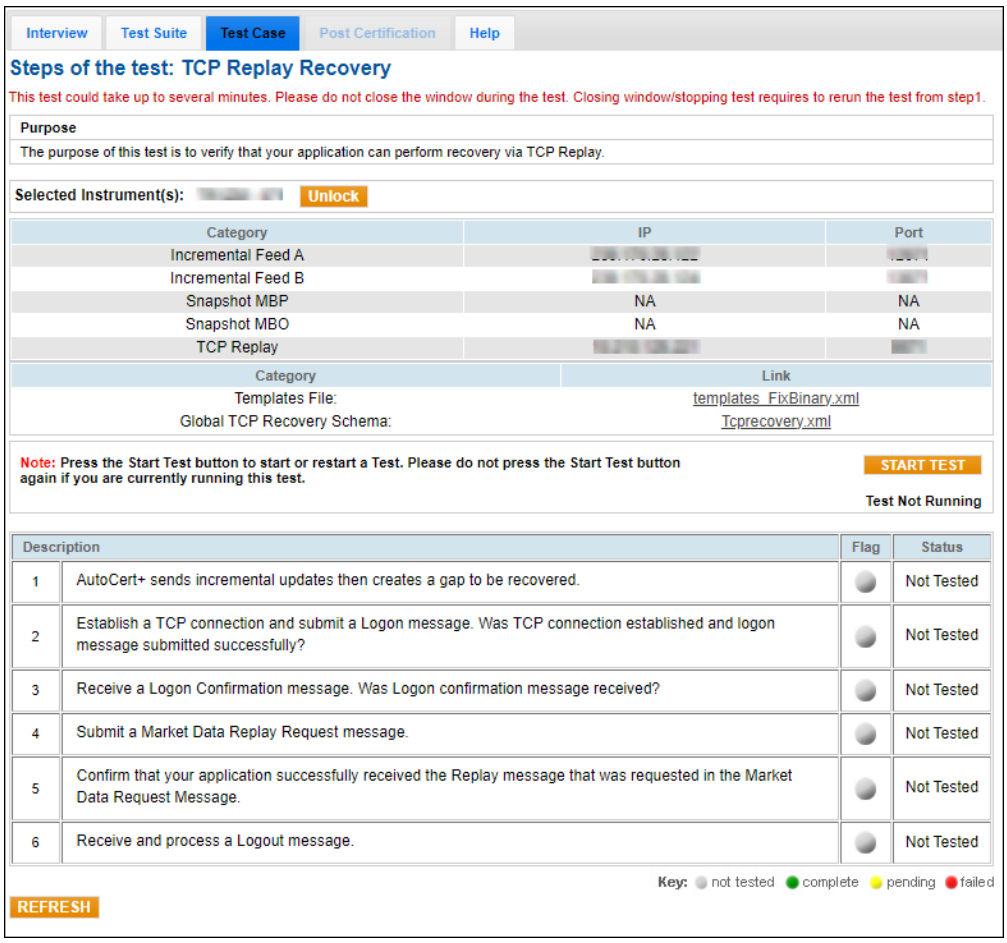
1. From the Testing Configuration screen, select an **Identifier**, then select **Assign**.
2. On the selected Test Case screen, select an **Instrument**, then select **START TEST**.

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 (tag 35-MsgType=A) message.

   (If applicable) Respond to the question by selecting *Yes* / *No* - Was the TCP connection established and logon message submitted successfully?
3. Receive a Logon confirmation message.

   (If applicable) Respond to the question by selecting *Yes* / *No* - Was a Logon confirmation message received?
4. Submit a Market Data Replay Request (tag 35-MsgType=V) message.
5. Confirm that your application successfully received the Replay message that was requested in the Market Data Request Message, by entering the following tag values:
   - tag 270-MDEntryPx
   - tag 9732-FormattedLastPx
6. Receive and process a Logout (tag 35-MsgType=5) message.



Incremental Message for RepoFunds Rate (RFR) Benchmarks

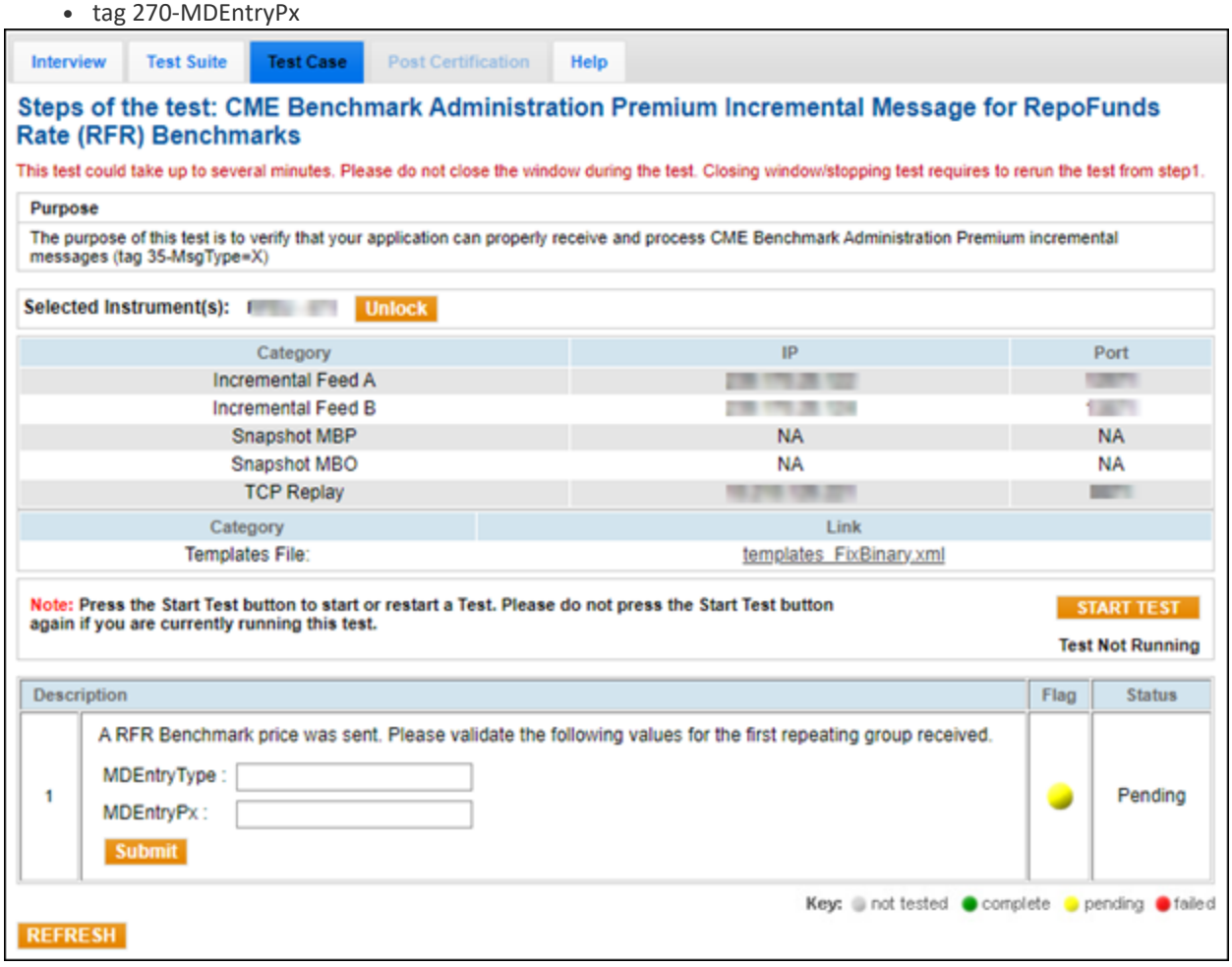
The purpose of this test is to verify that your application can properly receive and process CME Benchmark Administration Premium incremental messages (tag 35-MsgType=X).

Note: See also:
- CME Group Benchmark Administration
- CME Benchmark Administration Premium Message Specification

Prior to beginning the test, select:

1. From the Testing Configuration screen, select an **Identifier**, then select **Assign**.
2. On the selected Test Case screen, select an **Instrument**, then select **START TEST**.

To run the Incremental message for RepoFunds Rate benchmark test:

AutoCert+ sends a RFR Benchmark price. Validate the following values for the first repeating group received.

- tag 269-MDEntryType
- tag 270-MDEntryPx