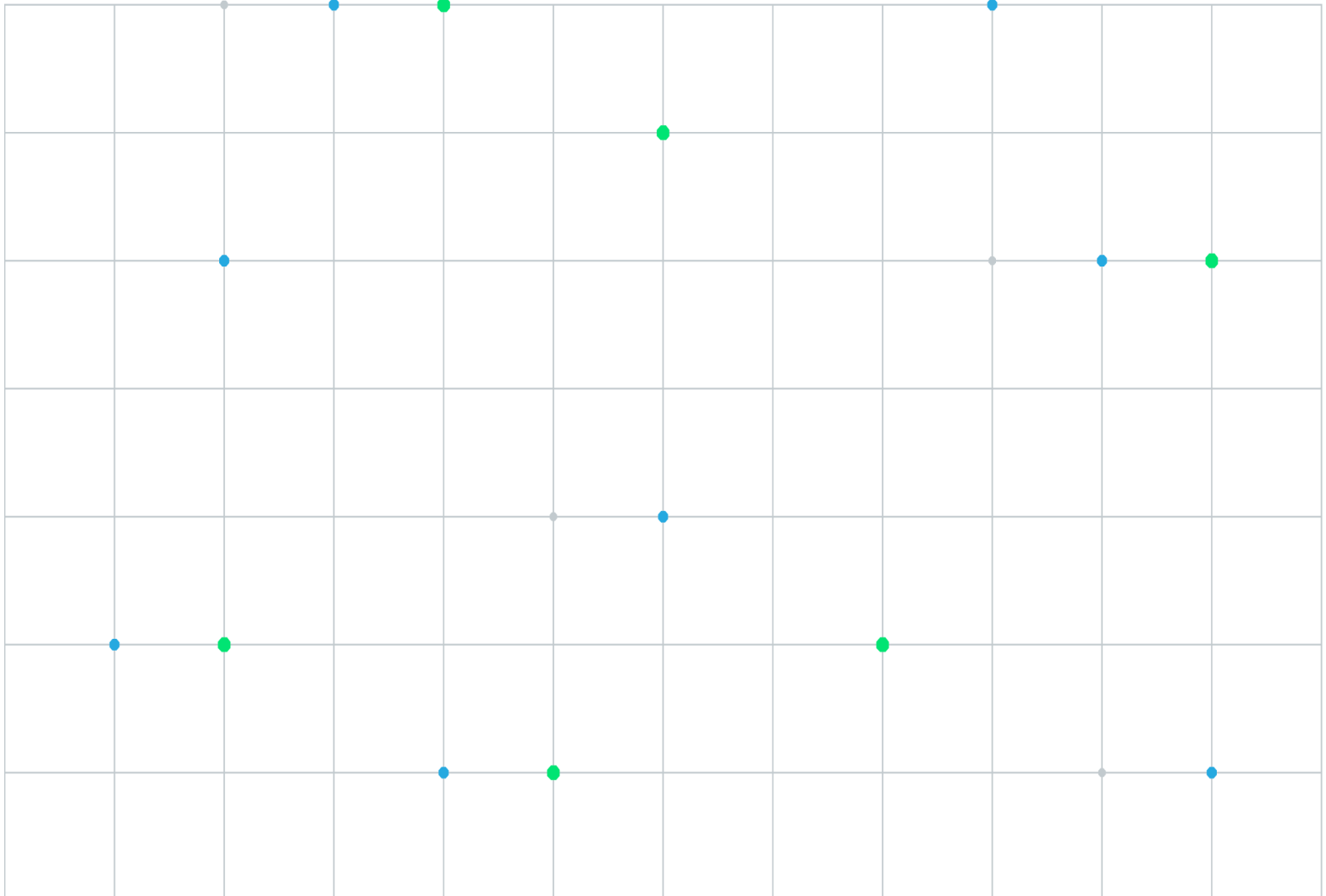


# AutoCert+ CME STP User Manual

October 20, 2022



## Disclaimer

---

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 All matters pertaining to rules and specifications herein are made subject to and are superseded by official CME, CBOT and NYMEX rules.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

---

<b>Getting Started</b> .....	<b>4</b>
What's New .....	5
Interview .....	6
<b>Certification Tests</b> .....	<b>7</b>
Subscription Requests .....	8
Example Subscription Request Test .....	8
Subscription Requests for Post Trade Events .....	10
Example Subscription Request Test for Post Trade Events .....	10
Query Requests .....	12
Example Query Request Test .....	12

# 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 STP 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+ CME STP Help system.

Date	Topic	Description
October 20, 2022	Format	Website and PDF format changes only.
April 29, 2022	<a href="#">Interview</a>	Updated screenshot.
September 26, 2019	<a href="#">Interview</a>	Updated screenshot.
	<a href="#">Subscription Requests</a> <a href="#">Subscription Requests for Post</a> <a href="#">Trade Events</a> <a href="#">Query Requests</a>	Updated screenshots and steps.
February 5, 2019		Initial release.

# Interview

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

You must complete the pre-certification interview before running the tests.

**Note:** Brokered trades, including Broker Fee's (commissions data), flow through the ClearPort venue for retrieval in CME STP, enabling Clearing Firms to see the broker fees on their trade capture reports. To include tests with brokered trade data in the test suite, select 'ClearPort' in response to the interview question, "What venues does your application support? Select one or more:" Detailed information on broker fee retrieval in CME STP is available [here](#).

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

Interview	Test Suite	Test Case	Post Certification	Help
<b>Which of the following does your application support? Select one or more.</b>				
<input checked="" type="checkbox"/> Trading Firm (Globex and Clearport Trades)				
<input checked="" type="checkbox"/> Broker Firm (Clearport Trades only)				
<input checked="" type="checkbox"/> Asset Manager Firm (Clearport Trades only)				
<b>Does your system support multiple parties via a single Trade Capture Report Request? Select one:</b>				
<input type="radio"/> Yes				
<input type="radio"/> No				
<b>Does your system support ClearPort Broker Fees? Select one:</b>				
<input type="radio"/> Yes				
<input type="radio"/> No				
<b>What Exchange(s) will your system support? Select one or more.</b>				
<input checked="" type="checkbox"/> Chicago Mercantile Exchange (CME)				
<input checked="" type="checkbox"/> New York Mercantile Exchange (NYMEX)				
<input checked="" type="checkbox"/> Chicago Board of Trade (CBT)				
<input checked="" type="checkbox"/> Commodity Exchange (COMEX)				
<input checked="" type="checkbox"/> Dubai Mercantile Exchange (DME)				
<b>What security type (s) does your system support? Select one or more.</b>				
<input checked="" type="checkbox"/> Futures (FUT)				
<input checked="" type="checkbox"/> Options (OPT)				
<input checked="" type="checkbox"/> Forwards (FWD)				
<input checked="" type="checkbox"/> Multi Legs (COMBO)				
<b>What venues does your application support? Select one or more:</b>				
<input checked="" type="checkbox"/> Globex				
<input checked="" type="checkbox"/> ClearPort				
<b>How will your system be supporting multi-leg securities? Select one or more:</b>				
<input checked="" type="checkbox"/> Spread Level (MLegRptTyp= "3" / 442=3)				
<input checked="" type="checkbox"/> Leg Level (MLegRptTyp= "2" / 442=2)				
<b>What requests will your application support? Select one or more:</b>				
<input checked="" type="checkbox"/> Subscription Request				
<input checked="" type="checkbox"/> Query Request				
<b>Which type of Subscription requests will your application support (choose 1)</b>				
<input type="radio"/> Both unfiltered and filtered subscription requests				
<input type="radio"/> Only filtered subscription requests				
<input type="radio"/> Only unfiltered subscription requests				
<b>If your application can support Filtered Subscription Requests, please state which filters are supported?</b>				
<input checked="" type="checkbox"/> Venue				
<input checked="" type="checkbox"/> Exchange				
<input checked="" type="checkbox"/> Product Type				
<input checked="" type="checkbox"/> Product (Exchange also required)				
<input checked="" type="checkbox"/> Start Time				
<b>Which type of Query requests will your application support (choose 1)</b>				
<input type="radio"/> Both unfiltered and filtered query requests				
<input type="radio"/> Only filtered query requests				
<input type="radio"/> Only unfiltered query requests				
<b>If your application can support Filtered Query Requests, please state which filters are supported?</b>				
<input checked="" type="checkbox"/> Trade ID				
<input checked="" type="checkbox"/> Secondary Trade ID				
<input checked="" type="checkbox"/> Client Order ID				
<input checked="" type="checkbox"/> Venue				
<input checked="" type="checkbox"/> Exchange				
<input checked="" type="checkbox"/> Product Type				
<input checked="" type="checkbox"/> Product (Exchange also required)				
<input checked="" type="checkbox"/> Clearing Business Date				
<input checked="" type="checkbox"/> Trade Date				
<input checked="" type="checkbox"/> Start Time + End Time				
<b>Complete</b>				

# Certification Tests

The AutoCert+ CME STP certification tests consist of the following:

- [Subscription Requests](#)
- [Subscription Requests for Post Trade Events](#)
- [Query Requests](#)

## Subscription Requests

The Subscription Request tests verify that your application can request and process STP messages that are sent on a real-time basis.

**Note:** Brokered trades, including Broker Fee's (commissions data), flow through the ClearPort venue for retrieval in CME STP, enabling Clearing Firms to see the broker fees on their trade capture reports. To include tests with brokered trade data in the test suite, select 'ClearPort' in response to the interview question, "What venues does your application support? Select one or more:" Detailed information on broker fee retrieval in CME STP is available [here](#).

### Example Subscription Request Test

**Note:** The example test procedure below is for an unfiltered subscription request for CPC trades and may not appear in your test suite. The tests included in the test suite will depend on the answers you provided in the Interview.

**Steps of the test: Unfiltered Subscription Request for CPC Trades - Trading Firm**

**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 request and process STP messages that are sent in a real time basis.

**Selected Contract :** CBND Unlock

**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 Send an initial subscription request (unfiltered)	●	Complete
2 Receive a batch file	●	Complete
3 Send a continuous subscription request and confirm if polling is greater than 3 seconds:	●	Complete
4 Receive a Trade and Confirm Product Code (ID), Trade Quantity (LastQty) and Trade Price (LastPx) from first Trade Capture Report	●	Complete
5 Send a continuous subscription request	●	Complete
6 Receive an empty batch	●	Complete
7 Send a continuous subscription request	●	Complete
8 Receive an empty batch	●	Complete

Key: ● not tested ● complete ● pending ● failed

REFRESH

#### ▶ To run the Unfiltered Subscription Request for CPC Trades test:

1. Click **START TEST** to begin.

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

2. Send an initial [subscription request \(unfiltered\)](#).
3. Receive a [batch file](#).
4. Send a continuous subscription request and confirm if polling is greater than 3 seconds.
5. Receive a [Trade](#) and confirm the Product Code (ID), Trade Quantity (LastQty) and Trade Price (LastPx) from the first Trade Capture Report.



4	<p>Receive a Trade and Confirm Product Code (ID), Trade Quantity (LastQty) and Trade Price (LastPx) from first Trade Capture Report</p> <p>Product Code (ID): <input type="text"/></p> <p>Trade Quantity (LastQty): <input type="text"/></p> <p>Trade Price (LastPx): <input type="text"/></p> <p><input type="button" value="Submit"/></p>		Pending
---	---	---	---------

6. Send a continuous subscription request.
7. Receive an empty batch.
8. Send a continuous subscription request.
9. Receive an empty batch.

## Subscription Requests for Post Trade Events

The Subscription Request for Post Trade Events tests verify that your application can properly process post trade events that occur when you have already received your STP messages.

**Note:** Brokered trades, including Broker Fee's (commissions data), flow through the ClearPort venue for retrieval in CME STP, enabling Clearing Firms to see the broker fees on their trade capture reports. To include tests with brokered trade data in the test suite, select 'ClearPort' in response to the interview question, "What venues does your application support? Select one or more:" Detailed information on broker fee retrieval in CME STP is available [here](#).

### Example Subscription Request Test for Post Trade Events

**Note:** The example test procedure below is for a subscription request for CPC trades and may not appear in your test suite. The tests included in the test suite will depend on the answers you provided in the Interview.

**Selected Contract:** ESZ8 Unlock

**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 Send an initial subscription request	●	Complete
2 Receive a batch file	●	Complete
3 Send a continuous subscription request and confirm if polling is greater than 3 seconds:	●	Complete
4 Receive a set of trades and Confirm if trade has been voided	●	Complete
5 Send a continuous subscription request and confirm if polling is greater than 3 seconds:	●	Complete
6 Receive a set of trades and Confirm if trade has been allocated and the quantity allocated	●	Complete
7 Send a continuous subscription request and confirm if polling is greater than 3 seconds:	●	Complete
8 Receive a set of trades and Confirm what the original price was and what the new price due to Transfer Correction	●	Complete
9 Send a continuous subscription request and confirm if polling is greater than 3 seconds:	●	Complete
10 Receive a set of trades and Confirm if trade has been voided (Account update away from the firm)	●	Complete
11 Send a continuous subscription request and confirm if polling is greater than 3 seconds:	●	Complete
12 Receive a set of trades and Confirm the status of the trade (Trade has been transferred)	●	Complete
13 Send a continuous subscription request and confirm if polling is greater than 3 seconds:	●	Complete
14 Receive a set of trades and Confirm if trade has been updated to different account with in the same firm	●	Complete

Key: ● not tested ● complete ● pending ● failed

REFRESH

#### ▶ To run the Unfiltered Subscription Request for CPC Trades test:

1. Click **START TEST** to begin.


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

2. Send an initial [subscription request](#).
3. Receive a [batch file](#).


4. Send a continuous subscription request and confirm that polling is greater than 3 seconds.
5. Receive a set of [trades](#) and confirm that the trade has been voided.

4	Receive a set of trades and Confirm if trade has been voided Transaction Type (TransTyp) : <input type="text"/> <input type="button" value="Submit"/>		Pending
---	---	---	---------


6. Send a continuous subscription request and confirm if polling is greater than 3 seconds.
7. Receive a set of trades and confirm that the trade has been allocated and the quantity allocated.

6	Receive a set of trades and Confirm if trade has been allocated and the quantity allocated Trade Quantity (LastQty) : <input type="text"/> Original Trade Allocation Indicator(AllocInd) : <input type="text"/> Offset Trade Offset Instruction (OfstInst) : <input type="text"/> <input type="button" value="Submit"/>		Pending
---	---	---	---------

8. Send a continuous subscription request and confirm that polling is greater than 3 seconds.
9. Receive a set of trades and confirm what the original price was and what the new price is due to Transfer Correction.

8	Receive a set of trades and Confirm what the original price was and what the new price due to Transfer Correction Original Price : <input type="text"/> New Price : <input type="text"/> <input type="button" value="Submit"/>		Pending
---	---	---	---------


10. Send a continuous subscription request and confirm if polling is greater than 3 seconds.
11. Receive a set of trades and confirm that the trade has been voided (Account update away from the firm).

10	Receive a set of trades and Confirm if trade has been voided (Account update away from the firm) Transaction Type (TransTyp) : <input type="text"/> <input type="button" value="Submit"/>		Pending
----	---	---	---------

12. Send a continuous subscription request and confirm that polling is greater than 3 seconds.
13. Receive a set of trades and confirm the status of the trade (Trade has been transferred).

12	Receive a set of trades and Confirm the status of the trade (Trade has been transferred) Offset Trade Side (Side) : <input type="text"/> Offset Trade Input Source (InptSrc) : <input type="text"/> <input type="button" value="Submit"/>		Pending
----	--	---	---------

14. Send a continuous subscription request and confirm that polling is greater than 3 seconds.
15. Receive a set of trades and confirm that the trade has been updated to a different account within the same firm.

14	Receive a set of trades and Confirm if trade has been updated to different account with in the same firm Trade Account : <input type="text"/> <input type="button" value="Submit"/>		Pending
----	---	---	---------

# Query Requests

The Query Request tests verify that your application can request and process historical STP messages.

**Note:** Brokered trades, including Broker Fee's (commissions data), flow through the ClearPort venue for retrieval in CME STP, enabling Clearing Firms to see the broker fees on their trade capture reports. To include tests with brokered trade data in the test suite, select 'ClearPort' in response to the interview question, "What venues does your application support? Select one or more:" Detailed information on broker fee retrieval in CME STP is available [here](#).

## Example Query Request Test

**Note:** The example test procedure below is for an unfiltered query request for CPC trades and may not appear in your test suite. The tests included in the test suite will depend on the answers you provided in the Interview.

**Steps of the test: Unfiltered Query Request for CPC Trades - Trading Firm**

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 request and process STP messages that are sent in a real time basis.

Category	Value
Start Time	2019-08-05T05:33:00-05:00

**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 Send an initial query request (unfiltered) using start time value as displayed above	<span style="color: green;">●</span>	Complete
2 Receive a batch file	<span style="color: green;">●</span>	Complete
3 Send a continuous query request	<span style="color: green;">●</span>	Complete
4 Receive a batch file with rest of the trades and validate the first trade in this batch - Confirm Product Code (ID), Trade Quantity (LastQty) and Trade Price (LastPx) from first Trade Capture Report	<span style="color: green;">●</span>	Complete

Key: ● not tested ● complete ● pending ● failed

**REFRESH**

**To run the Unfiltered Query Request for CPC Trades test:**

1. Click **START TEST** to begin.

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

2. Send an initial [query request \(unfiltered\)](#) using the start time value as displayed above.
3. Receive a [batch file](#).
4. Send a continuous query request.
5. Receive a batch file with the rest of the trades and validate the first trade in this batch - Confirm Product Code (ID), Trade Quantity (LastQty) and Trade Price (LastPx) from the first Trade Capture Report.

<b>4</b>	Receive a batch file with rest of the trades and validate the first trade in this batch - Confirm Product Code (ID), Trade Quantity (LastQty) and Trade Price (LastPx) from first Trade Capture Report  Product Code (ID) : <input type="text"/> Trade Quantity (LastQty) : <input type="text"/> Trade Price (LastPx) : <input type="text"/> <span style="background-color: orange; color: white; padding: 2px 5px; border: 1px solid black;"><b>Submit</b></span>	<span style="color: yellow; font-size: 20px;">●</span>	Pending
----------	---	--	---------