



CME Cleared Trades (CT) API

Partner Certification Process Checklist

Version 1.3

Revision History

By (full name)	Date	Reason & Description of Changes	Version
Mildred Rodriguez	08/04-24/2005	Initial Draft	1.0
Mildred Rodriguez	7/25/2006	<u>Revision:</u> Reformatting and slight changes to the document.	1.1
Mildred Rodriguez	4/30/2007	<u>Revision:</u> Reformatting, slight changes to the document and changes to the Test Script.	1.2
Mildred Rodriguez	5/15/2009	<u>Revision:</u> Reformatting, slight changes to the document and changes to the Test Script.	1.3
Michael Healy	5/25/2011	<u>Revision:</u> Updated content.	1.4

1. Registration Information

Registration forms, agreements and support information can be obtained by contacting Market Operations Technical Support at thirdpartyservices@cmegroup.com or at <http://www.cmegroup.com/clearing/ClearedTradesAPI.html>.

- Receive the CME Cleared Trades API Certification Registration Form
 - Receive, execute and return the CME ClearPort Developer Utility Agreement
- Please Note: You must agree to the developer agreement in order to continue.

For More Information

Contact Market Operations Technical Support at (800)275-6215 or via email at thirdpartyservices@cmegroup.com.

2. Attend Kickoff Meeting

Schedule and attend a kickoff meeting with Market Operations Technical Support to:

- Meet your Exchange Certification Team
- Review the Exchange's FIXML implementation
- Review the Certification environment connectivity

Action Required

- Schedule the kickoff meeting Market Operations Technical Support one week in advance
- Review the API definition in the Implementation Guide and participate in meeting

For More Information

Contact Market Operations Technical Support at (800)275-6215 or via email at thirdpartyservices@cmegroup.com.

3. Submit Required Forms

Description

In order to obtain access to the CME Cleared Trades (CT) API, interested parties must have access to at least one of the following venues:

- CME ClearPort® Clearing
- CME ClearPort® Trading
- CME Globex®
- NYMEX Division Trading Floor
- COMEX Division Trading Floor

For access to the Certification Environment, the following form must be completed.

Forms Necessary

- CME Cleared Trades (CT) API Certification Registration Form. This form specifies and provides the Exchange with the company and user identifiers, IP addresses and port numbers that the API will use to define connections to the test environments. You will be provided a corresponding IP address and port number.

Actions Required

- Complete and submit the CME Cleared Trades API Certification Registration Form to Market Operations Technical Support.

For More Information

Contact Market Operations Technical Support at (800)275-6215 or via email at thirdpartyservices@cmegroup.com.

4. Configure Certification Connection

Description

Although certification testing will be performed via the public internet, it is necessary that your network be correctly configured to the Exchange's TCP Port and IP Address exposed within your network.

Forms Necessary

The CME Cleared Trades API Certification Registration Form should have been completed and returned by this point.

Action Required

- Configure your firewall.

For More Information

Contact Market Operations Technical Support at 1-800-275-6215 or via email at thirdpartyservices@cmegroup.com.

5. Develop Client Application

Description

Develop a client application to receive trades in accordance with the CME Cleared Trades API Definition.

Action Required

- Code and test the client application.

For More Information

Contact Market Operations Technical Support at 1-800-275-6215 or via email at thirdpartyservices@cmegroup.com.

6. Execute the Certification Test

Description

The Certification Test comprises of 2 parts:

- Functional test: Tests your system's compliance with the Exchange's rules and data validation.
- Operational test: Exercise your system by means of requesting subscription, query and polling messages.

The developer must determine when their front-end is completed and ready for Production by executing the certification test.

Action Required

- Review and Execute the Certification test Script.

For More Information

Contact Market Operations Technical Support at 1-800-275-6215 or via email at thirdpartyservices@cmegroup.com.

7. Submit Required Forms

Description

The forms listed below must be received online by Market Operations Technical Support prior to accessing the Production Environment.

Forms Necessary

- CME Cleared Trades API Pre-Production Form. This form specifies and provides the Exchange with the company and user identifiers, preferred mode of connection to the Exchange, IP addresses and port numbers that the API will use to define connections to the Production environment. You will be provided a corresponding IP address and port number.

Actions Required

- Complete and submit the CME Cleared Trades API Pre-Production Form to Market Operations Technical Support no less than 2 weeks before the planned launch in Production.

For More Information

Contact Market Operations Technical Support at 1-800-275-6215 or via email at

thirdpartyservices@cmegroup.com.

8. Configure Production Connection

Description

It is necessary that your network be correctly configured to the Exchange's TCP Port and IP Address exposed within your network.

Forms Necessary

The CME Cleared Trades API Pre-Production Form should have been completed and returned by this point.

Action Required

- Configure your firewall.
- Configure your preferred mode of connection.

For More Information

Contact Market Operations Technical Support at 1-800-275-6215 or via email at thirdpartyservices@cmegroup.com.

9. Execute Connectivity Test

Description

Ensure that your server establishes and maintains a connection with the Exchange's server.

Action Required

- Configure your production server to connect to the Exchange's production server.
- Schedule the Connectivity Test with Market Operations Technical Support.
- Execute a ping test.
- Connect to the Exchange's server and log on.
- Monitor the connection for at least 15 minutes.

Prerequisites

Completion of the Certification Test.

For More Information

Contact Market Operations Technical Support at 1-800-275-6215 or via email at thirdpartyservices@cmegroup.com.

10. Production Monitoring

Description

To ensure that FIXML messages are being correctly received.

Action Required

- Prior to commencement of requesting a subscription, query or polling, notify Market Operations Technical Support so that your activity can be monitored during the first hour of trading.

Timeframe

This activity takes place at the start of trading on the first day of trading.

Prerequisites

- Successful completion of the Certification and Connectivity tests.
- Completion and submission of all required forms and agreements.

For More Information

Contact Market Operations Technical Support at 1-800-275-6215 or via email at thirdpartyservices@cmegroup.com.

CME Cleared Trades API: Sample Certification Test Script

Functional Test Script

Each test comprises an action and one or more observations of expected results. In the table below, actions are in **boldface** and observations in normal type. It is recommended that out-rights and strips are tested along with positive, negative and zero prices.

Please submit a script of trades entered into the venues mentioned above to Market Operations Technical Support for verification and certification on the CME Cleared Trades (CT) API.

Step	Partner	Exchange
Connect		
1	Log on to your front-end client and connect to the CT API (see logon.xml).	CT API logs the inbound logon.
	Receive acknowledgement.	CT API logs the outbound acknowledgement.
Change Password		
2	Request new password upon initial login (see changepassword.xml).	CT API logs request.
	Receive acknowledgement.	CT API changes password and provides the outbound acknowledgement.

Subscription Request		
3	<p>Submit a Subscription Request from a certain LastUpdateTm to retrieve missing trades or to recover from system down time. A Subscription with LastUpdateTm specified will continue to retrieve those trades created after the subscription time in addition to retrieving past trades created on/after the LastUpdateTm specified. If LastUpdateTm is provided after the current time or 24 hours before subscription time, the request will be rejected. Subscription time filter is limited to 24 hours in the past.</p>	CT API logs request.
	<p>Receive continuous FIXML data feed (see Implementation Guide's section 6.5.3 page 25 for request).</p>	CT API provides data.
Subscription Request by Filter		
4	<p>Submit a Subscription Request by using the SecurityExchange (Exch) filter or any other filter available.</p>	CT API logs request.
	<p>Receive continuous FIXML data feed (see Implementation Guide's section 6.5.3 page 25 for request).</p>	CT API provides data.
Query Request		
5	<p>Submit a Query Request using the filters you want to use.</p>	CT API logs request.
	<p>Receive FIXML data feed (see Implementation Guide's section 6.6 page 27 for request and section 6.8 page 27 for response).</p>	CT API provides data.
Log Off		
6	<p>Log off (see logoff.xml).</p>	CT API logs the inbound logon.
	<p>Receive acknowledgment.</p>	CT API logs the outbound acknowledgement.