

# CME STP

Use this search bar to search topics within CME STP.

 To export individual or multiple pages of this site to PDF, view these [instructions](#).

CME Straight Through Processing (CME STP) is designed to allow customers to connect to the Exchange for retrieval of FIXML 5.0 SP2 messages containing NYMEX, COMEX, DME, CBOT via CMD, and CME cleared trade information. The CME STP solution focuses on end to end trading customer interfaces for all markets and provides real-time trade flow between the front and middle office.

The Exchange requires a basic working knowledge of FIXML to interface with CME Straight-Through Processing API (CME STP). Information on FIX protocol and access to the FIXML 5.0 SP2 specifications are located at <http://fixprotocol.org>.

## Related Content

- [CME STP - Supported Functions](#)
- [CME STP FIXML Library](#)
- [CME STP - FIXML Message Specification](#)
- [CME STP - FIXML Message Samples](#)
- [CME STP BaCE API](#)
- [CME STP FIX](#)

This page describes:

- [Onboarding and Certification](#)
- [CME STP API Connectivity](#)
  - [Internet](#)
  - [Disaster Recovery Considerations](#)
- [Starting Times](#)
- [Supported Functions](#)
- [Supported Clients](#)
- [Mode of Connectivity](#)
- [Technology](#)
- [CME STP Trade View](#)

## Onboarding and Certification

[Contact](#) CME Group to begin the CME STP onboarding process. Firm Administrators can use [CME Group Login](#) to manage their CME STP API IDs and passwords.

New CME STP customers systems must [certify](#). Contact [Certification Support for Electronic Trading \(CSET\)](#) for more information.

## CME STP API Connectivity

Customers can connect to CME STP FIXML API and CME STP FIX API via the following options:

- Internet
- Dedicated CME Group connectivity (Production access only) – CME Glink, CME EConnect, CME EConnect Secaucus, LNet and CME Globex Hubs.

### Internet

To access CME STP or CME STP API over the internet, customers must connect to the following URLs:

Service	Environment	DNS Name	IP
CME STP FIXML over HTTPS	New Release	<a href="https://servicesnr.cmegroup.com/cmestp/query">https://servicesnr.cmegroup.com/cmestp/query</a>	164.74.123.116
	Production	<a href="https://services.cmegroup.com/cmestp/query">https://services.cmegroup.com/cmestp/query</a>	
FIX API over Secure TCP	New Release	<a href="https://fixstpnr.cmegroup.com:443">https://fixstpnr.cmegroup.com:443</a>	164.74.123.193
	Production	<a href="https://stpfixapi.cmegroup.com:443">stpfixapi.cmegroup.com:443</a>	

 These URLs use certificates signed by an official trusted Certificate Authority (CA). Customers do not need to install additional certificates.

**CME Group Connectivity (Production access only)** - CME Glink, CME EConnect, CME EConnectSecaucus, LNet, CME Globex Hub

For the production environment only, clients may also choose to access CME STP and CME STP FIX over their leased lines.

- FIXML API over HTTPS
  - PROD - <https://services.cmegroup.com/cmestp/query>
- FIX API (Secure TCP based)
  - PROD - <stpfixapi.cmegroup.com:443>



These URLs also use certificates signed by a trusted CA and customers do not need to install additional certificates.

Clients must create a Domain Name Service (DNS) record in their systems to associate the DNS name and following IPs to access the STP services:

Service	DNS Name	IP
CME STP FIXML	<a href="https://services.cmegroup.com/cmestp/query">https://services.cmegroup.com/cmestp/query</a>	167.204.41.29
CME STP FIX	<a href="stpfixapi.cmegroup.com:443">stpfixapi.cmegroup.com:443</a>	167.204.41.90

## Disaster Recovery Considerations

During a disaster recovery (DR) event clients will automatically be directed to the DR instance of CME STP and CME STP FIX. Clients do not need to make any connectivity changes.

Please find CME Group connectivity options [here](#).

## Starting Times

See CME Group [Trading Hours](#).

CME STP is available in PRODUCTION beginning 2 PM Central Time Sunday afternoon through 9 PM Central Time Friday. Internal testing occurs every weekend in the Production Environment; please make sure your API is not connected from Friday night until Sunday morning.

Trades that occur on CME ClearPort and CME Globex will not make the opposite broker of the trade available due to the competitive fairness in the market place rule.

## Supported Functions

CME STP supports all cleared trades for all asset classes. It uses HTTPS polling to retrieve the cleared trades in a secure fashion.



Trades are available from CME STP for 31 calendar days, including the current date, based on trade date.

If a trade is corrected during this cycle, that trade will reflect the most recent information with a new transaction date and time.

CME STP allows trading firm and broker firm participants, and asset managers to view their Exchange trading, off-Exchange trading, and clearing activity via subscription and query messages. CME STP provides trade and allocation information from the following sources:

Source	Description
CHB	ConfirmHub
CPC	CME Clearport.
CXPIT	COMEX Trading Floor
DLV	Delivery Transfer Represents the monthly delivering into a strip of individual daily positions and the transfer to establish the open position on the books of the firm or client.
FIRM	Clearing firm submission into FEC via UI or API.
GLBX	CME Globex.
GBX	
IRS	Trade Capture reports values represent Platform Name e.g. BLOOMBERG, MARKIT, TRADEWEB.
NXPIT	NYMEX Trading Floor
PCBOT	CBOT Trading Floor


CME STP supports these major functions:

Function	Description
Trade Capture Reports & Notifications	Provides Cleared Trade Notifications.
Queries	Allows queries for CME STP using parameters such as Party (Broker, Trading Firm, Asset Manager), Trade Date, Venue, Product and Exchange supported by REST style HTTP parameters / FIXML message (e.g. TrdCaptRptReq).
Spreads	Provides a choice between receiving spread-level messages with legs, or individual leg-level messages.
Allocations	Provides allocation information on messages to executing firm and offset and onset messages to the executing and claiming firm.

See more about [Supported Functions](#).

## Supported Clients

CME STP supports the following clients:

Client Type	Description
Trading Firms	<p>Allows Trading Firms to view Exchange trading, off-Exchange trading, and clearing activity using Subscription and Query requests and Trade Capture Report responses, associated with their Trading Firm only.</p> <div style="border: 1px solid #ccc; padding: 10px; margin-top: 10px;"> <p> Clearing Members have full access to FEC. Trading Participants do not have any access to FEC. If Trading Participants should have any questions regarding trade details in FEC, please contact your Clearing Member for assistance.</p> <p><b>Clearing Members:</b> To ensure that trading firm participants will be able to view their trades on the API, clearing firm account administrators must enter their customer accounts into <a href="#">CME Account Management Service</a>.</p> </div>
Asset Managers	Allows Asset Managers to view all trades associated with the Trading Firms that are set up for them (via CME Account Management Service) using Subscription and Query requests and Trade Capture Report responses.
Brokers	Allows Brokers to view ONLY CME ClearPort trades that they have brokered using Subscription and Query requests and Trade Capture Report responses.

## Mode of Connectivity

Interaction with the API is session-less. Provide a username and password on each HTTP request, and CME STP authenticates it. CME STP sends a token in response to valid subscription requests and valid query requests where the response requires multiple pages. Continue the subscription or request the next page of the query by sending CME STP this token on subsequent requests. Both customers and CME STP will use the `x-cme-token` custom HTTP Request Header to transmit this token.



### Note

TCP/IP over TLS 1.2 is required to establish physical connection to CME STP.



Authentication is required in the header of the HTTP request and should be in format of "username:password" converted to base 64.

## Technology

CME STP is built upon [Representation State Transfer \(REST\)](#) web service technology. In this methodology, HTTP URLs and methods (such as GET, POST, etc.), parameters, and statuses are used to model the remote procedure call behavior.

The API utilizes the industry standard FIXML format with custom CME extensions.

## CME STP Trade View

For details about the CME STP Trade View GUI, please refer to this [User Help System](#).