ClearLink Overview



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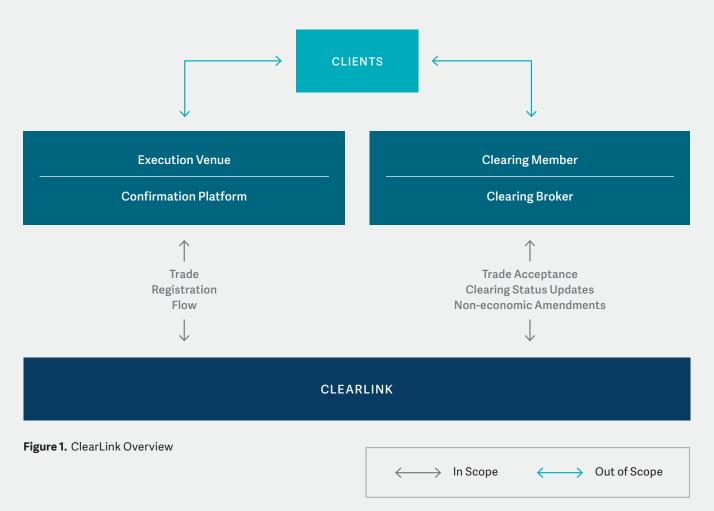
This guide is designed to give parties interested in connecting to the LCH ForexClear (LCH.FXC) Service a high-level overview of LCH's OTC Clearing Service Direct Connectivity protocol, ClearLink.

DIRECT CONNECTIVITY

ClearLink provides an interface mechanism for Market Participants and Market Infrastructure to interact with LCH's OTC Clearing services. It consists of following:

- 01. A messaging standard that describes the format and the content of messages that are supported by ClearLink.
- $02.\,$ A specification of the messaging interactions supported by ClearLink.
- $03. \ {\rm A}\ {\rm specification}\ {\rm of}\ {\rm products}\ {\rm supported}\ {\rm by}\ {\rm ClearLink}.$

The figure below provides a high-level view of ClearLink:



DIRECT CONNECTIVITY

The LCH.FXC ClearLink version F1.3 (May 2014) messaging specification covers the following message interactions:

| PARTY ROLE | BUSINESS PROCESSES | MESSAGE SPECIFICATION |
|--------------------------|--|---|
| Confirmation Platform | Trade Registration Trade Cancellation | requestClearing clearingStatus clearingAcknowledgement messageRejected clearingConfirmed clearingRefused |
| | Non-economic Updates | requestTradeReferenceInformationUpdate tradeReferenceInformationUpdateAcknowledgement tradeReferenceInformationUpdateException messageRejected |
| FCM | Trade Take-up Consent | requestConsent consentAcknowledgement consentGranted consentRefused |
| | Collateral Allocation | requestCollateralAllocation collateralAllocationAcknowledgement collateralAllocationAccepted collateralAllocationRejected |

Table 1. ClearLink version F1.3 Specification Scope

ClearLink is based on FpML (Financial products Markup Language), which is an industry-standard protocol for complex financial products. FpML is based on XML (eXtensible Markup Language), a standard meta-language for describing data shared between applications.

The version of FpML must be 5.6 to conform to version F1.3 of the ClearLink specification.

Only the following FpML message types are accepted by ClearLink:

- 01. requestClearing
- 02. consentAcknowledgement
- 03. consentGranted
- $04. \ {\rm consent} {\rm Refused}$
- $05. \ {\rm clearingAcknowledgement}$
- 06. requestCollateralAllocation
- 07. requestTradeReferenceInformationUpdate

DIRECT CONNECTIVITY

ClearLink only sends the following FpML message types:

- 01. clearingAcknowledgement
- 02. clearingRefused
- 03. clearingStatus
- 04. clearingConfirmed
- $05.\ trade {\sf ReferenceInformation} {\sf UpdateAcknowledgement}$
- $06.\ trade {\sf ReferenceInformationUpdateException}$

- 07. messageRejected
- 08. requestConsent
- 09. consentAcknowledgement
- 10. collateralAllocationAcknowledgement
- $11. \ \ collateral Allocation Accepted$
- 12. collateralAllocationRejected

PARTY ROLES

01.

Central Counterparty

This is the party who provides the CCP (Central Counterparty) role by novating the original trades. This role is carried out by LCH.FXC. This role is also referred to as the "clearer".

02.

Trade Source

This party identifies the source of the trade to the Clearing Service. This role is referred to as the "Trade Source". For LCH.FXC ClearLink version F1.3 this will be the confirmation platforms (trade matching platforms) only.

03.

Execution Venue

The facility where the trade was executed, such as a Swap Execution Facility (SEF).

04.

Clearing Broker / Futures Commission Merchant (FCM)

The Clearing Broker ("CB") / FCM is a financial institution that is a direct member of the Clearing House and is able to offer Client-clearing services to other parties. This role is referred to as "Clearing Broker".

05.

Client

A Client is the price-taking party in the original, bi-lateral transaction that will be cleared. They are typically buy-side financial institutions that are not direct members of the Clearing House, hence they need an intermediary to face the Clearing House on their behalf. This role is referred to as "Client".



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MESSAGE VALIDATION

- 01. ClearLink requires that messages conform to the FpML standard, 5.6 as stated above, and additionally adhere to business rules specified in the detailed specification document. Messages inbound are first validated against the FpML schema, and if successful, further validation is performed to ensure that the message conforms to the specified business rules. A non-conforming message shall be rejected by ClearLink, and a messageRejected message shall be sent to the sender informing of the reason for rejection.
- 02. ClearLink also requires that all participants exchanging messages via ClearLink perform their own message validation. ClearLink shall accept a messageRejected message from a participant as an indication that the message has been rejected due to non-conformance, and route this message to the clearing service.

NETWORK ACCESS

The interconnection network between LCH.FXC and the Members is via IBM MQ messaging over a dedicated BT Radianz connection.

FURTHER DOCUMENTATION

The ClearLink specification defines additional rules and restrictions that must be followed when creating the FpML messages. The detailed specification can be provided when onboarding, along with example messages, error codes, the products ClearLink supports, and connectivity related documentation.

FOR FURTHER INFORMATION ON LCH.FXC, PLEASE CONTACT:

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