ClearLink Overview



SwapClear

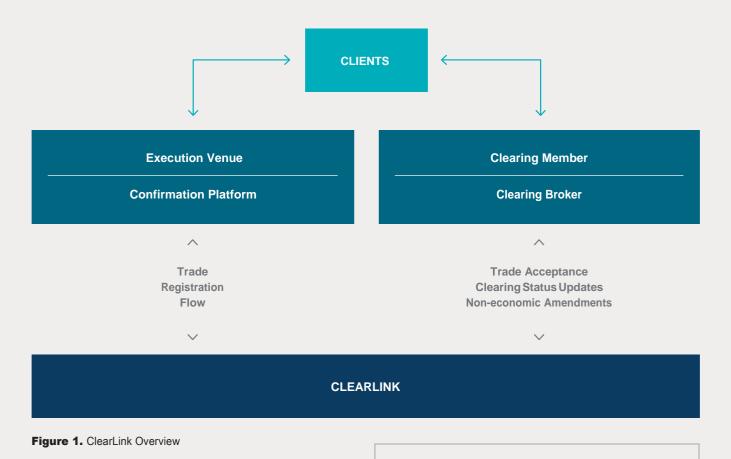
 $This guide is designed to give parties interested in connecting to the LCH Swap Clear Service \ a high-level overview of LCH's OTC Clearing Service Direct Connectivity protocol, Clear Link.\\$

DIRECT CONNECTIVIT Y

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

- 1. A messaging standard that describes the format and the content of messages that are supported by ClearLink.
- 2. A specification of the messaging interactions supported by ClearLink.
- 3. A specification of products supported by ClearLink.

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



In Scope

Out of Scope



DIRECT CONNECTIVIT Y

The LCH.SwapClear ClearLink version 1.8 messaging specification covers the following message interactions:

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

Table 1. ClearLink version 1.8 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 5.7 to conform to version 1.8 of the ClearLink specification.

Only the following FpML message types are accepted by ClearLink:

- $1. \quad \ \ \, \text{requestClearing}$
- 2. consentAcknowledgement
- 3. consentGranted
- 4. consentRefused
- 5. clearingAcknowledgement
- 6. requestCollateralAllocation
- 7. requestTradeReferenceInformationUpdate



DIRECT CONNECTIVIT Y

ClearLink only sends the following FpML message types:

- 1. clearingAcknowledgement
- clearingRefused
- 3. clearingStatus
- 4. clearingConfirmed
- 5. tradeReferenceInformationUpdateAcknowledgement
- 6. tradeReferenceInformationUpdateException

- 7. messageRejected
- 8. requestConsent
- 9. consentAcknowledgement
- 10. collateralAllocationAcknowledgement
- 11. collateralAllocationAccepted
- 12. collateralAllocationRejected

PART Y 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. SwapClear. 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. SwapClear ClearLink version 1.8 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".





MESSAGE VALIDATION

- ClearLink requires that messages conform to the FpML standard, 5.7 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 nonconforming message shall be rejected by ClearLink, and a messageRejected message shall be sent to the sender informing of the reason for rejection.
- 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. SwapClear 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.



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