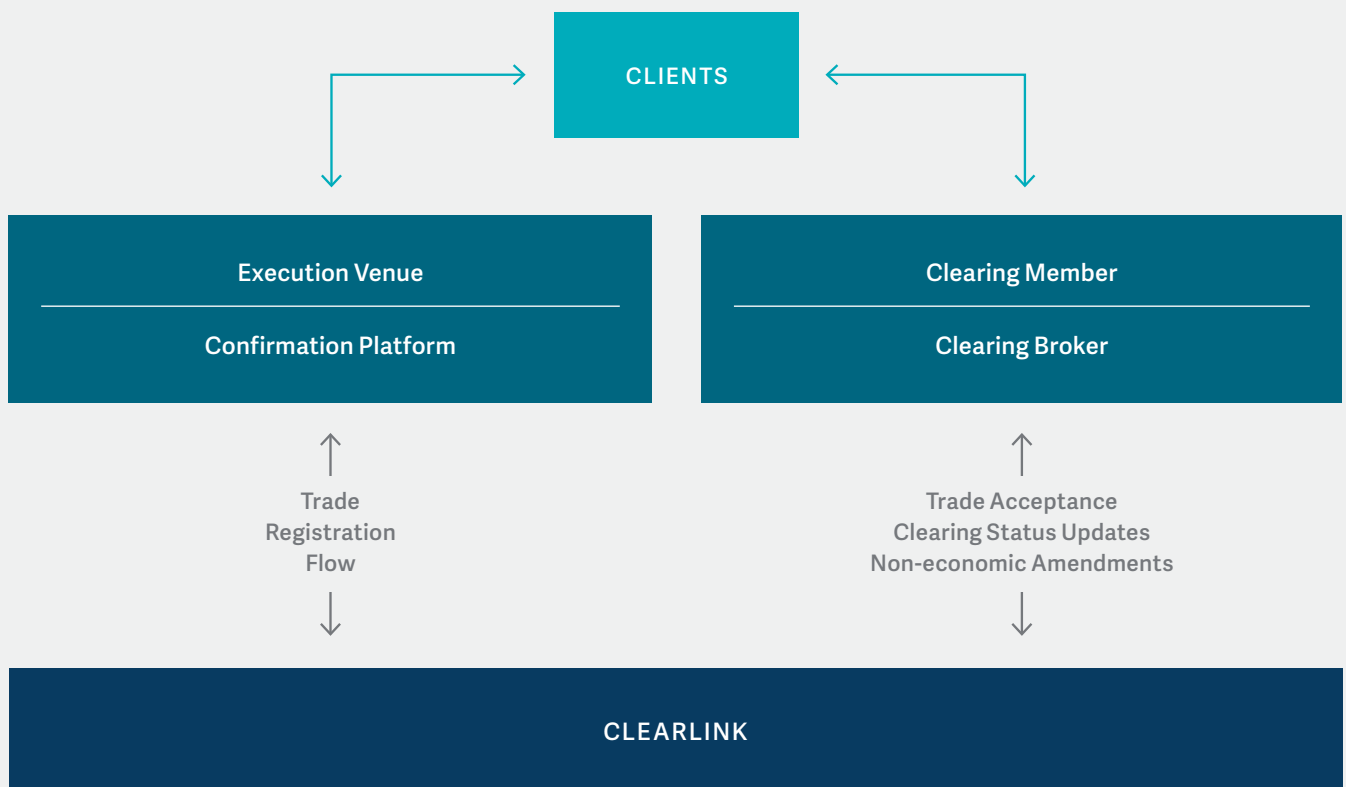# ClearLink Overview

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.
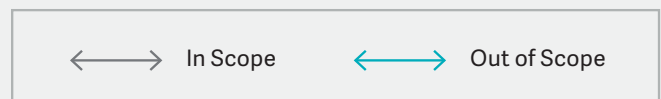
DIRECT CONNECTIVITY

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. A specification of products supported by ClearLink.

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

Figure 1. ClearLink Overview

DIRECT CONNECTIVITY

The ForexClear ClearLink Messaging Specification (available on LCH Secure Area) covers the following messaging specification.

Party Role	Business Processes	Message Specification	
Confirmation Platform	Trade Registration Trade Cancellation	requestClearing clearingAcknowledgement clearingConfirmed clearingRefused	clearingStatus messageRejected
	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 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.

Only the following FpML message types are accepted by ClearLink:

01. requestClearing
02. consentAcknowledgement
03. consentGranted
04. consentRefused
05. clearingAcknowledgement
06. requestCollateralAllocation
07. requestTradeReferenceInformationUpdate

DIRECT CONNECTIVITY

ClearLink only sends the following FpML message types:

01. clearingAcknowledgement
02. clearingRefused
03. clearingStatus
04. clearingConfirmed
05. tradeReferenceInformationUpdateAcknowledgement
06. tradeReferenceInformationUpdateException
07. messageRejected
08. requestConsent
09. consentAcknowledgement
10. collateralAllocationAcknowledgement
11. collateralAllocationAccepted
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 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".
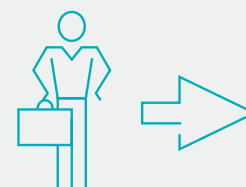
MESSAGE VALIDATION

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.

CONTACT US

Clive Hadingham
Head of FX Sales

Email	clive.hadingham@lseg.com
Mobile	+44 (0) 7980 775371
Phone	+44 (0) 20 7426 7631

Email	lchsales@lseg.com
Website	lch.com/services/forexclear
Twitter	@LCH_Clearing