

ForexClear Quick-Start Guide

For Alternative Trading System (ATS) Connectivity

LCH The Markets' Partner

ForexClear

This quick-start guide provides an overview of the requirements for connecting your ATS to LCH ForexClear, either directly or indirectly, so that you can begin submitting OTC FX Non-deliverable Forwards (NDFs) and Non-deliverable Options (NDOs) for clearing.

WHY FOREXCLEAR?

ForexClear is LCH's market leading FX clearing service.

ForexClear covers over **97 percent** of the cleared NDF market, which includes the most actively traded currencies in the marketplace.

Award-winning, market-leading FX clearing service



Global offering including **12** emerging market (EMTA) currencies and **12** Non-EMTA currencies for NDFs and **9** NDO CCY pairs, with 24-hour/5.5-days-a-week service



Full suite of reporting and service MIS to support customer audit and reconciliation requirements



GETTING STARTED

First, you will need to decide how you would like to connect to ForexClear:

DIRECT

Connect to ForexClear via ClearLink

INDIRECT

Connect to ForexClear via a middleware provider

Connecting to ForexClear as an ATS takes approximately three months, from initiation to go live. The exact timing is dependent upon the level of independent testing you wish to conduct as well as upon meeting each of the key milestones, which will be discussed in more detail in the sections to follow.

- 01. Initiation & Documentation
- 02. Connectivity & Build
- 03. Testing
- 04. Go Live

GO-LIVE TIMELINE FOR ATSS

Weeks 1–8		Weeks 8–10	Weeks 10–12
LCH Membership Documentation and Approval	Connectivity and Build	Scripted BAU and Default Management Testing	Go-Live

INITIATION AND DOCUMENTATION

Our product and onboarding teams will help get you started, providing full details on all the steps required to go live.

Whether you connect to ForexClear directly or indirectly, you will need to complete the following legal and operational documents as part of the ForexClear ATS onboarding process:

ATS Connection Documentation

Document	Description
Non-Disclosure Agreement (NDA)	Legal confidentiality agreement between LCH ForexClear and ATS
Clearing Services Agreement (CSA)	Legal agreement between LCH ForexClear and ATS
Joint Operating Procedures	Addendum to CSA detailing principles around operating procedures and SLAs that must be adhered to
FX ATS SFTP User Form	Technical form to enable a participant to be set up with SFTP access to ATS reporting
BCP Procedures	Business Continuity/Disaster Recovery Outline, if connecting directly
Static Data Form	ForexClear Venue Onboarding Questionnaire

ATS's connecting to ForexClear will also be subject to internal approval from LCH as well as approval from the relevant regulatory bodies.

CONNECTIVITY AND BUILD: DIRECT CONNECTIVITY

Choosing a direct connection will allow you to submit trades for clearing directly into ForexClear via the LCH ClearLink API.

Direct connectivity on the ClearLink API is supported over MQ via BT Radianz. To help fully integrate your connection, ForexClear will provide:

01. Full messaging and product specifications
02. Structured testing to rigorously check your messaging build
03. Connectivity to access our suite of reports via SFTP
04. Technical support as needed

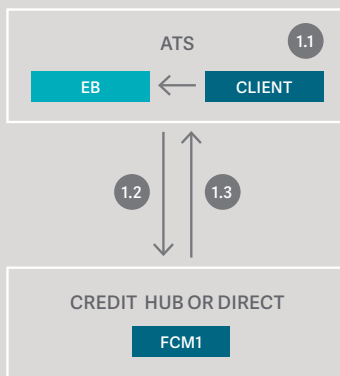
A direct connection to ForexClear allows you to benefit from:

01. Direct queues into the clearing house
02. No additional middleware provider fees
03. Lower latency due to omission of middleware
04. Incident management procedures between ForexClear and your organization, reviewed on a regular basis

Direct Connectivity to ForexClear is established in accordance with our ClearLink specification, available on the LCH Secure Area by registering at the following link: https://secure-area.lchclearnet.com/secure_area/register.asp

01.

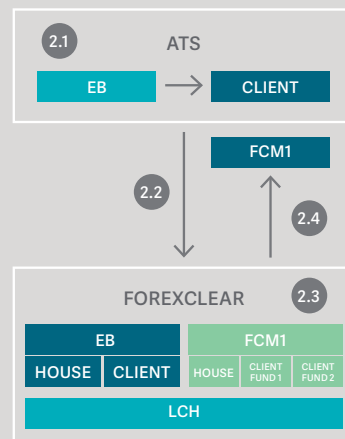
Pre-Trade Credit Check



- 1.1 Price taker (Client) submits order to ATS along with FCM and CCP selection.
- 1.2 ATS sends credit approval request to FCM.
- 1.3 FCM performs pre-trade credit check on client account and either rejects request or accepts and issues credit token for order.

02.

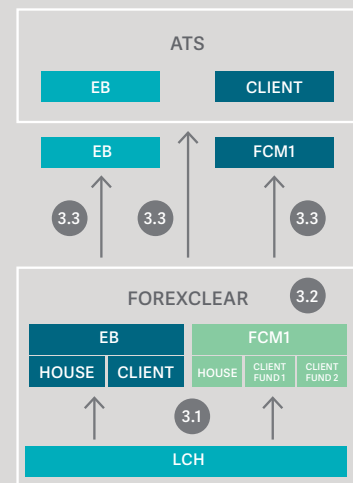
Submission for Clearing



- 2.1 Price maker (EB) fills client order.
- 2.2 ATS sends matched trade direct to LCH with FCM credit token.
- 2.3 LCH performs trade/ATS-FCM eligibility check.
- 2.4 LCH sends notification (in case, pre-trade credit check missing, LCH sends 'requestclearing' message) of fill to respective FCM pre-trade credit check.

03.

Clearing



- 3.1 LCH splits both sides of the trade between EB house and client fund accounts (T2 booking model).
- 3.2 LCH runs incremental risk check and trade is novated or rejected for clearing. LCH books the trades in the relative accounts.
- 3.3 LCH sends 'clearingconfirmed' message to ATS and directly to EB and FCM. Message will include a unique ForexClear ID.

NOTE: Clearing rejections will need to be reflected at ATS. Trade will be torn up (void ab initio) if ATS rulebook permits.

EB – Execution Broker, FCM- Futures Commission Merchant

CONNECTIVITY AND BUILD: INDIRECT CONNECTIVITY

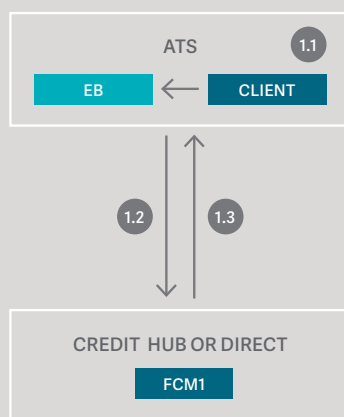
If you choose to submit trades for clearing via a middleware provider, you will need to establish a relationship with a ForexClear-approved provider: MarkitServ and/or Traiana for NDFs, MarkitServ for NDOs.

To help fully integrate your connection, ForexClear will provide:

01. Full messaging and product specifications
02. Connectivity to access our suite of reports via SFTP
03. Technical support as needed

01.

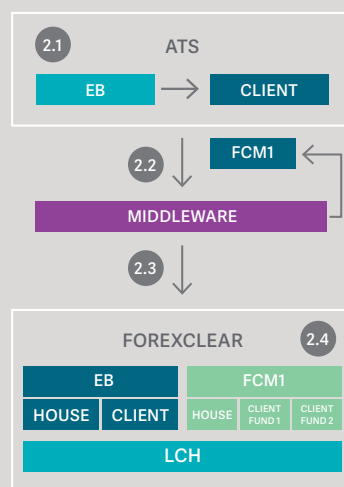
Pre-Trade Credit Check



- 1.1 Price taker (Client) submits order to ATS along with FCM and CCP selection.
- 1.2 ATS sends credit approval request to FCM.
- 1.3 FCM performs pre-trade credit check on client account and either rejects request or accepts and issues credit token for order.

02.

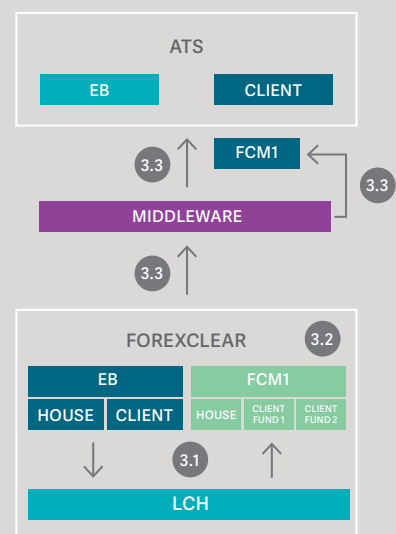
Submission for Clearing



- 2.1 Price maker (EB) fills client order.
- 2.2 ATS sends matched trade via middleware to LCH with FCM credit token.
- 2.3 LCH performs trade/ATS-FCM eligibility check.
- 2.4 LCH sends notification (in case, pre-trade credit check missing, LCH sends 'requestclearing' message) of fill via middleware to respective FCM(s), which includes credit token assigned from FCM pre-trade credit check.

03.

Clearing



- 3.1 LCH splits both sides of the trade between EB house and client fund accounts (T2 booking model).
- 3.2 LCH runs incremental risk check and trade is novated or rejected for clearing. LCH books the trades in the relative accounts.
- 3.3 LCH sends 'clearingconfirmed' message, containing a unique ForexClear ID, to middleware platform. Middleware routes message to ATS, EB, FCM and/or client.

NOTE: Clearing rejections will need to be reflected at ATS. Trade will be torn up (void ab initio) if ATS rulebook permits.

TESTING

Once connectivity is established, our team will guide you through each stage of the testing process.

We offer dedicated testing cycles to allow for easy planning and to ensure you are ready to begin clearing OTC FX with ForexClear.

Testing Outline

Direct ATS	Indirect ATS	Testing Type	Description
✓		Connectivity Testing	Initial ping and messaging testing, build out to ClearLink specifications and physical connectivity testing.
✓	✓	End-to-End Certification Testing	Fully scripted, customized tests to cover all your specific business-as-usual scenarios.
✓	✓	ATS Reporting Validation and Processing	Tests to confirm successful consumption of downstream reporting, which provides daily trade activity and ensures all static data mapping is fully aligned and reconciled for newly onboarded clients and members.
✓		Disaster Recovery and Business Continuity Testing	Tests performed between all data centers to demonstrate service resilience during disruption to normal business operations.

GO LIVE

ForexClear coordinates several pre-go live checks to ensure you are fully connected, static data is reconciled, and you are ready to begin trade submission.

To guarantee your connectivity is fully integrated and you are ready to launch, we will conduct a final production smoke test to ensure all relevant mapping and connections are in place.

Once integration is validated, trades become fully eligible for production submission to LCH ForexClear and the ForexClear Member community is informed that the new venue is live and available for trade submission.

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