

SwapClear quick-start guide

For approved trading system (ATS) connectivity

LCH offers a variety of swap classes, indexes and maturities across 21 currencies and over tenors stretching from 1 month to 51 years. This quick-start guide provides an overview of the requirements for connecting your ATS to SwapClear, either directly or indirectly, so that you can begin submitting OTC IR Swaps for clearing.

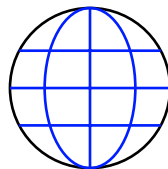
Why LCH SwapClear?

SwapClear is LCH's market leading IRS clearing service.

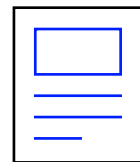
SwapClear covers 95 percent of the vanilla IRS market, which includes the most actively traded currencies in the marketplace.



Award-winning, market-leading
SwapClear clearing service



Global offering covering 21 currencies,
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

Connect to LCH SwapClear via LCH Trade Sharer

Connect to SwapClear via a middleware provider

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

DIRECT

INDIRECT

Connecting to SwapClear as an ATS takes approximately three months, from initiation to go live. The exact timing is dependent upon the level of independent testing you

1. Initiation & Documentation
2. Connectivity & Build
3. Testing
4. 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 LCH SwapClear directly or indirectly, you will need to complete the following legal and operational documents as part of the SwapClear ATS onboarding process:

ATS Connection Documentation

DOCUMENT	DESCRIPTION
Non-Disclosure Agreement (NDA)	Legal confidentiality agreement between SwapClear and ATS
Clearing Services Agreement (CSA)	Legal agreement between SwapClear and ATS
Joint Operating Procedures	Addendum to CSA detailing principles around operating procedures and SLAs that must be adhered to
Static Data Form	SwapClear Venue Onboarding Questionnaire ATS's

ATS's connecting to SwapClear 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 LCH SwapClear via the LCH Trade Sharer API.

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

1. Full messaging and product specifications
2. Structured testing to rigorously check your messaging build
3. Technical support as needed

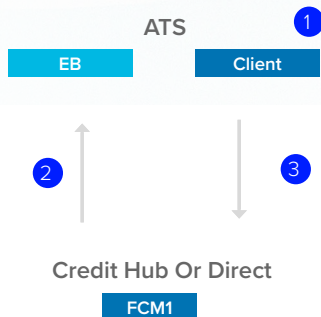
A direct connection to SwapClear allows you to benefit from:

1. Direct queues into the clearing house
2. No additional middleware provider fees
3. Lower latency due to omission of middleware
4. Incident management procedures between SwapClear and your organization, reviewed on a regular basis

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

1

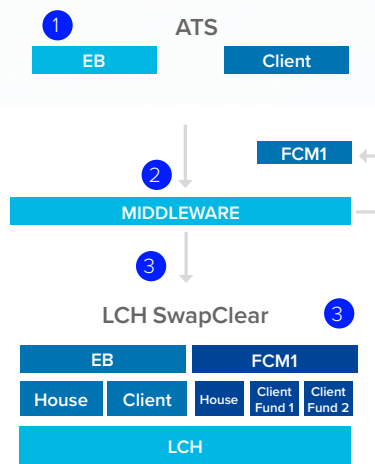
Pre-trade credit risk



1. Client submits order to ATS along with a selection of FCM and CCP.
2. ATS sends credit approval request to FCM.
3. FCM performs pre-trade credit check on client account and either rejects request or accepts and issues credit token for order.

2

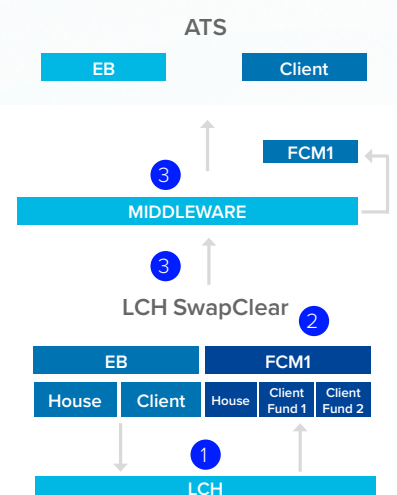
Submission for clearing



1. EB fills client order.
2. ATS sends matched trade to LCH via a middleware provider. Message contains the FCM credit token.
3. LCH performs trade/ATS-FCM eligibility checks.
4. LCH sends notification of fill to respective FCM(s), which includes credit token assigned from FCM pre-trade credit check.

3

Clearing



1. LCH runs incremental risk check and trade is novated or rejected for clearing.
2. LCH novates the trade by creating two new transactions - One between LCH and EB house and the second between LCH and client fund accounts.
3. LCH sends notification message to ATS via middleware provider and directly to EB and FCM. Message will include a unique SwapClear ID.

Connectivity and build: indirect connectivity

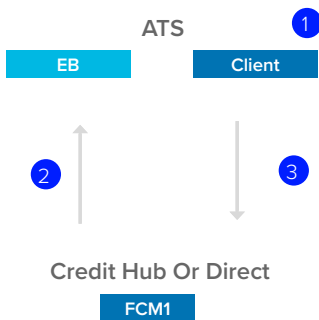
If you choose to submit trades for clearing via a middleware provider, you will need to establish a relationship with a LCH SwapClear-approved provider: MarkitSERV and/or Traiana.

To help fully integrate your connection, SwapClear will provide:

1. Full messaging and product specifications
2. Technical support as needed

1

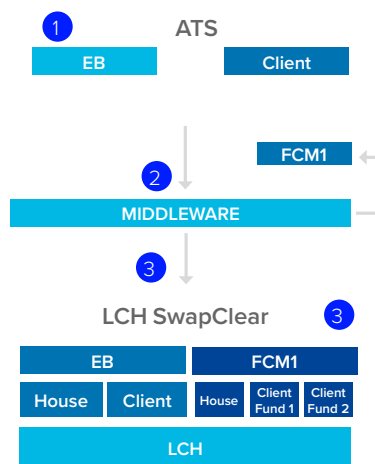
Pre-trade credit risk



1. Client submits order to ATS along with a selection of FCM and CCP.
2. ATS sends credit approval request to FCM.
3. FCM performs pre-trade credit check on client account and either rejects request or accepts and issues credit token for order.

2

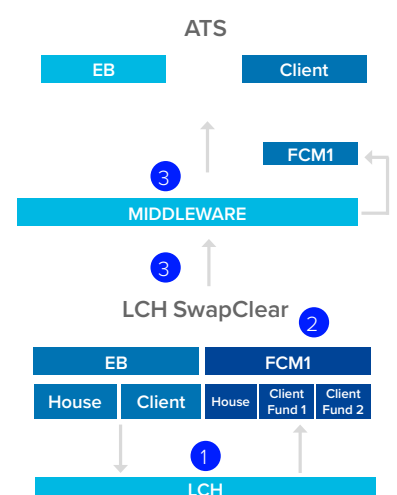
Submission for clearing



1. EB fills client order.
2. ATS sends matched trade to LCH via a middleware provider. Message contains the FCM credit token.
3. LCH performs trade/ATS-FCM eligibility checks.
4. LCH sends notification of fill to respective FCM(s), which includes credit token assigned from FCM pre-trade credit check.

3

Clearing



1. LCH runs incremental risk check and trade is novated or rejected for clearing.
2. LCH novates the trade by creating two new transactions - One between LCH and EB house and the second between LCH and client fund accounts.
3. LCH sends notification message to ATS via middleware provider and directly to EB and FCM. Message will include a unique SwapClear ID.

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 Interest Rate Swaps with SwapClear.

Testing Outline

DIRECT ATS	INDIRECT ATS	TESTING TYPE	DESCRIPTION
✓	✓	Connectivity Testing	Initial ping and messaging testing, build out to LCH Trade Sharer specifications and physical connectivity testing.
✓	✓	End-to-End Certification Testing	Fully scripted, customized tests to cover all your specific business-as-usual scenarios.

Go live

SwapClear 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 SwapClear and the SwapClear Member community is informed that the new venue is live and available for trade submission.



LSEG POST
TRADE

Contact us

Email lchsales@lseg.com

Phone +44 (0) 20 7426 7000

Website lch.com/services/swapclear

Disclaimer

This document has been provided to you for informational purposes only and is intended as an overview of certain aspects of, or proposed changes to, the SwapClear, Listed Interest Rates, SwapAgent and/or any other service provided by LCH Group Holdings Limited ("LCH Group") or any of its group undertakings (group undertakings shall be construed in accordance with section 1161 of the Companies Act 2006; each an ("LCH Group Company").

LCH Limited is supervised by the Bank of England within the UK regulatory framework, registered as a derivatives clearing organisation with the U.S. Commodity Futures Trading Commission ("CFTC") and recognised as a third-country CCP under Regulation (EU) No. 648/2012 of the European Parliament and of the Council of 4 July 2012 on OTC derivatives, central counterparties and trade repositories ("EMIR"). LCH S.A. is regulated and supervised in France by the Autorité des Marchés Financiers, the Autorité de Contrôle Prudentiel et de Résolution and the Banque de France, authorised as an E.U. CCP under EMIR, registered as a derivatives clearing organisation with the CFTC and as a clearing agency with the U.S. Securities and Exchange Commission. LCH Limited and LCH S.A. also hold licenses or authorisations in other jurisdictions in which they offer their services. More information is available at www.lch.com.

The relationship of an LCH Group Company with its members is governed solely by its rulebook and certain other ancillary documentation, as applicable. This document does not, and does not purport to, contain a detailed description of any aspect of a service provided by an LCH Group Company or any other topics discussed in this document, and it has not been prepared for any specific person. This document does not, and does not seek to, constitute advice of any nature. You may not rely upon the contents of this document under any circumstance and should seek your own independent legal, investment, tax and other advice. The information and any opinion contained in this document does not constitute a recommendation or offer with respect to any derivative contract, financial instrument, security or service. No LCH Group Company makes any representation, warranty, condition or guarantee (whether express or implied) that the contents of this document are accurate, complete or up-to-date, and makes no commitment to offer any particular product or service. No LCH Group Company shall have any liability for any losses, claims, demands, actions, proceedings, damages, costs or expenses arising out of, or in any way connected with, the information contained in this document, except that each LCH Group Company accepts liability that cannot be excluded by applicable law.

Copyright © LCH Limited 2023. All rights reserved. Copyright © LCH S.A. 2023. All rights reserved. LCH SwapClear, LCH CDSClear, LCH ForexClear, LCH RepoClear, LCH EquityClear, LCH SwapAgent and €GCPlus are registered trademarks of LCH.