

# ASX OTC Client Clearing API

Connectivity Guide

May 2017



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# 1. Introduction

The OTC Clearing API Framework provides industry standard FpML messaging workflows and incorporates pre-clearing credit limit checks to extend the OTC Clearing Service offering. This includes functionality for trade submission via Swap Execution Facilities and opens up flexibility for ASX margin analytic tools.

For the initial phase of this implementation, FpML messaging between Customers and ASX will be offered via the mutually authenticated IBM MQ Websphere MQ series service.

Before the on-boarding of new Swap Execution Facilities or Third Party Limit Hubs, a round of User Acceptance Testing is required.

## 1.1. How to read this Document

This document describes the process and pre-requisites for connecting to ASX via the MQ messaging service. It provides details for both Production and Test development and connectivity. This should be read in conjunction with:

- ASX OTC Client Clearing API Message Specification:

Location: <http://www.asx.com.au/services/clearing/otc-api.htm>

## 1.2. Intended Audience

1. Clearing Participants intending to interface with ASX OTC Client Clearing API.
2. Third Party Limit Hub intending to interface with ASX OTC Client Clearing API.
3. Swaps Execution Facilities intending to interface with ASX OTC Client Clearing API.

## 1.3. Document Scope

This document details the connectivity mechanism, network options and required configurations for Participants, SEFs and Limit Hubs to connect with ASX for test and production purposes.

## 2. Connectivity

For Participants using Websphere MQ Series, ASX provides a compatible message gateway for interaction with the CCP. Customers can submit messages to their ASX-hosted queue and receive response messages to their locally-hosted queue. ASX will also monitor customer connectivity via a heartbeat service.

### 2.1. Networking

A variety of networking solutions exist for MQ Series connectivity, these include:

- ASX Net and ASX Net Global Connectivity communities.
- For testing purposes or in certain BCP scenarios, Internet VPN can also be facilitated.

For more information on ASX Networking solutions, please contact: [InfoandTechServices@asx.com.au](mailto:InfoandTechServices@asx.com.au)

To arrange a connection to the ASX Client Clearing MQ Server for test or production purposes, please contact ASX Operations:

E: [asxclearfut@asx.com.au](mailto:asxclearfut@asx.com.au)

P: 1800 240 033 or +61 2 8298 8479

### 2.2. Participants

- Customers will provide ASX with the following MQ Server details:
  - Hostname
  - Port Number
  - Server Connection Channel
  - User Name
  - Password
- Additional points to be clarified:
  - What is the MQ Server Version and patch level
  - Is transport layer security (TLS) enabled? If yes, what's the cipher specification?
- Notification of BCP Arrangements
  - E.g. Does the participant operate a clustered queue manager or separate DR option
  - Appropriate Contact Details

## 2.3. ASX

- Will provide on-boarding Customers with the following details:
  - Any relevant IP Blocks
  - Confirmation of CCP technical readiness
  - A Participant mnemonic (if Customer is not an existing Clearing Member)

## 2.4. Swap Execution Facilities and Third Party Limit Hubs - User Acceptance Testing

Before the on boarding of new Swap Execution Facilities and new Third Party Limit Hubs a round of User Acceptance Testing will first be required to confirm that connections with the ASX OTC Client Clearing API perform as expected. This is anticipated to take approximately 1-2 weeks to complete. Once testing has been completed SEFs and Third Party Limit Hubs will then be on boarded for direct connection with the live ASX Production environment.

To coordinate User Acceptance Testing phase please contact ASX Operations:

E: [asxclearfut@asx.com.au](mailto:asxclearfut@asx.com.au)

P: 1800 240 033 or +61 2 8298 8479

## 2.5. Participant MQ Configuration:

The following MQ Queues will be required:

ASX.INBOUND (*suggestion only*) – Queue for clearing messages from ASX. The message producer will be ASX and the consumer will be the Participant. Different user accounts will be used by both the consumer and producer to read/write messages on the queue. Appropriate permissions will be set on the queue so that only the producer can write to the queue and the consumer read from the queue.

ASX.OUTBOUND (*suggestion only*) – Queue for clearing messages to ASX. The message producer will be the Participant and the consumer will be ASX. Different user accounts will be used by both the consumer and producer to read/write messages on the queue. Appropriate permissions will be set on the queue so that only the producer can write to the queue and the consumer read from the queue.

ASX.HEALTHCHECK (*suggestion only*) – Queue for ASX to use for the purpose of a health check. The message producer and consumer will be ASX. Since the consumer and producer are the same, the same user account can be used by both the consumer and producer to read/write messages on the queue.

### 3. MQ Message Specifications

All messages accepted by the service are defined in the “ASX OTC Client Clearing API Message Specification”. These are standard FpML v5.8 schema’s with no customised tags.

NOTE: MQ headers are also standardised for inbound and outbound messages. ASX requests that participants add the following **customised** headers on inbound messages:

<ASXCPID> *the 3-character Participant mnemonic (e.g. ABC)*

<ASXMessageType> *the FpML standard message type name (e.g. consentGranted)*

<ASXCorrelationID> *the correlation ID populated within the FpML message content (e.g. 123456789)*

### 4. Outages

Should a connectivity loss be recognised by the heartbeat service, ASX will attempt reconnection and liaise with participants to implement BCP procedures to recover the service. Note that in the event of extended downtime of the MQ channels, Participant responses can be processed manually by ASX Operations to maintain the clearing workflow.

To authorize the clearing of client trades in the event of service disconnection, please contact ASX Operations:

E: [asxclearfut@asx.com.au](mailto:asxclearfut@asx.com.au)

P: 1800 240 033 or +61 2 8298 8479