ASX Signal B

Frequently Asked Questions

November 2021

Table of Contents

1   Document Information

The purpose of this document is to assist existing ASX Signal B subscribers' transition to the new Signal B FIX service.

This document addresses frequently asked questions from the Signal B subscribers, and is to be viewed in conjunction with the latest version of the Signal B FIX Specification Manual in the Information Service – Market Activity Products page.

1.1   Version History

This document has been revised according to the table below:

Version	Date	Comment
1.0	Nov 2021	Initial release of document.

1.2   Signal B Support

For ASX Signal B support, please contact the below teams:

Enquiry	Team	Email	Phone
Technical Support	Customer Technical Support	cts@asx.com.au	1800 663 053 from within Australia +61 2 9227 0372 from international locations
Product Enquiry, Closing Time Extension Requests	Information Services	Information.Services@asx.com.au	+61 2 9227 0422
Production Support – user-related issues	Trading Operations	tradingoperations@asx.com.au	1300 655 560 +61 2 9235 1857

2 Questions and Answers

2.1 Account Lock

2.1.1 What if the account is locked after 6 failed password attempts?

In the event of an account lock, please contact CTS for requests relating to the Industry Test Environment (ITE), and Trading Operations to unlock a production account.

2.2 Trade Capture Report Messages

2.2.1 Will there only be one Trade Capture Report sent for a cross trade?

Yes, there will only be one **Trade Capture Report** (AE) message for a cross trade. The cross trade will indicate both the buy (54=1) and sell side (54=2) information within the message.

2.2.2 Under what scenario will 'XT' be visible in *TrdConditionCode (20003)* tag?

'XT' will be visible in the *TrdConditionCode* (20003) tag when the trade is a cross trade. Note that *NoSides* (552) will be 2 with *Side* (54) = 1 and Side (54) = 2 both visible. The 'XT' value will be concatenated in alphabetical order along with all other relevant values in the *TrdConditionCode* (20003) tag.

2.2.3 How to identify the short side of a cross short trade?

A side that is at a short position will display the *SideLastQty* tag with a positive value (1009 > 0). The *TrdConditionCode* (20003) tag will contain the value 'SH' indicating that the message is at a short position.

For a cross short trade, *SideLastQty* (1009) tag will display within the short side of the TrdCapRptSideGrp component after *Side* (54) tag.

2.2.4 If there is a short sell with partial quantity, would the *SideLastQty* (1009) equal the short-traded quantity or would it always equal the *LastQty* (32)?

The short-traded quantity is represented by the *SideLastQty* (1009). The *LastQty* (32) represents the sale volume (quantity). Therefore, *SideLastQty* (1009) should always be less than or equal to the *LastQty* (32).

The table below is an example of this relationship.

Use Case	Inventory	Sell Order	Short Sell Qty [*SideLastQty* (1009)]	Quantity [*LastQty* (32)]
Normal Sell	100	100	0	100
Short Sell	0	100	100	100
Partial Short Sell	100	150	50	150

2.2.5 Can we determine if the trades were matched in the auction?

The source of truth to check what trades were matched is the ASX Trade trading system. Signal B provides the outcome of the trade via **TradeCaptureReport** (AE) messages once a transaction has occurred on the trading system.

2.2.6 Does the trade date in the TradeCaptureReport (AE) message allow for backdating?

No, the *TradeDate* (75) tag only allows for the current date. Retransmission for a previous date and after cut-off time is not possible. Clients will need to contact CTS to arrange the retransmission of messages manually. However, manual message retransmissions will not be available during conformance testing in ITE.

2.2.7 How is the *Account* (1) tag in the TrdCapRptSideGrp component in the TradeCaptureReport (AE) message used for a cross and cross short trade? Is this a repeating group?

The *Account* (1) tag is a repeatable tag used for each side of the trade and can contain different values for the buyer and seller. In a cross trade and a cross short trade, the *Account* (1) tag will be visible for both buy and sell side in the same **TradeCaptureReport** (AE) message. The *Account* (1) tag that is representing the buy side will be grouped after the buy side (*Side* (54) = 1) and the *Account* (1) tag that is representing the sell side will be grouped after the sell side (*Side* (54) = 2).

2.3 Encryption

2.3.1 What is the encryption method of Signal B?

Signal B supports Transport Level Security (TLS) encryption and does not rely on native FIX encryption. The TLS version supported is TLS 1.2.

2.3.2 Is IP whitelisting supported?

Yes, client connections will be subject to an IP whitelist in production. ASX will whitelist an IP address to authorise customer subscriptions to Signal B. Whitelisting is disabled in ITE.
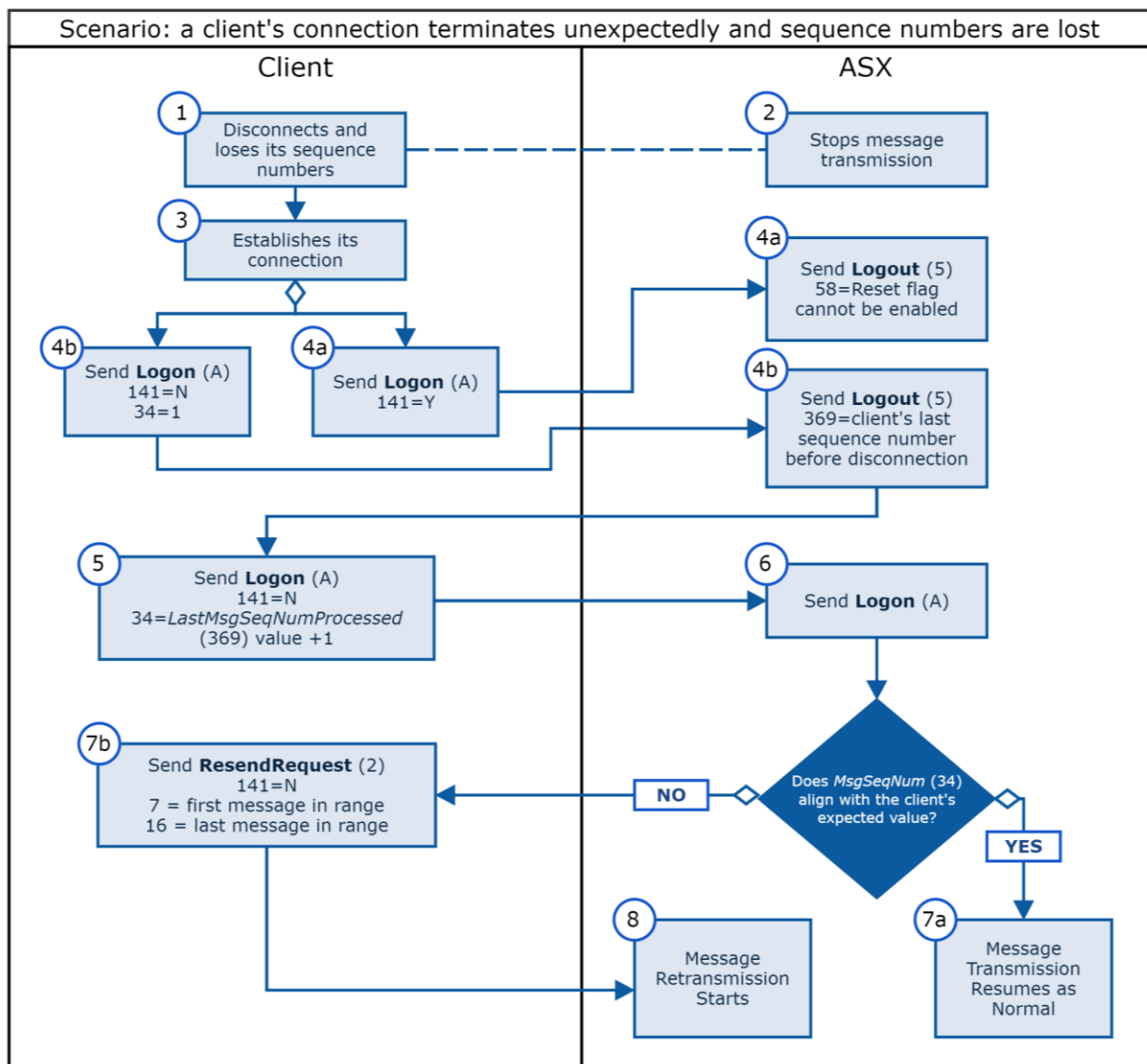
2.4 Recovery

2.4.1 If a client's connection terminates unexpectedly and the sequence numbers are lost, will it be possible to reset sequence numbers to 0?

Sequence numbers for both the exchange and client cannot be reset intraday. This is so that ASX can retain the client's sequence number and process message retransmissions if required. Thus, it is recommended that sequence number logs are also maintained on the client side.

In a scenario where the client's connection terminates and has lost all its sequence numbers, ASX will still retain the last sequence number that was processed by the client which will be indicated by the 'LastMsgSeqNumProcessed (369)' tag in the **Logout** (5) message header. Clients can then use this information to determine the next sequence number to logon with once connection is re-established.

This diagram illustrates the process.

Scenario: a client's connection terminates unexpectedly and sequence numbers are lost

Client | ASX

1 Disconnects and loses its sequence numbers
2 Stops message transmission
3 Establishes its connection
4a Send **Logout** (5) 58=Reset flag cannot be enabled
4b Send **Logon** (A) 141=N 34=1
4a Send **Logon** (A) 141=Y
4b Send **Logout** (5) 369=client's last sequence number before disconnection
5 Send **Logon** (A) 141=N 34=LastMsgSeqNumProcessed (369) value +1
6 Send **Logon** (A)
7b Send **ResendRequest** (2) 141=N 7 = first message in range 16 = last message in range
NO — Does MsgSeqNum (34) align with the client's expected value? — YES
8 Message Retransmission Starts
7a Message Transmission Resumes as Normal

Step Number	Behaviour
1	Client connection is lost
2	ASX detects the lost connection and stops sending messages
3	Client re-establishes its connection
4a	If client sends a **Logon** (A) message with *ResetSeqNumFlag* (141) = Y, ASX will reject by sending a **Logout** (5) message with *Text* (58) = Reset flag cannot be enabled. The connection is not established and client needs to re-attempt to logon with step 4b.
4b	If client sends a **Logon** (A) message either with *ResetSeqNumFlag* (141) = N or chooses not to include *ResetSeqNumFlag* (141) and *MsgSeqNum* (34) is a number that is lower than the expected message sequence number, ASX will reject the message by sending a **Logout** (5) message with *LastMsgSeqNumProcessed* (369) = the last message sequence number ASX received from the client (i.e., client's last outbound message sequence number)
5	After 4b, client is required to send a **Logon** (A) message with the correct *MsgSeqNum* (34) (i.e., *LastMsgSeqNumProcessed* (369) value +1) to connect to the ASX FIX Gateway
6	ASX will acknowledge the logon request by responding with a **Logon** (A) message with ASX's outbound *MsgSeqNum* (34)
7a	If the ASX's outbound *MsgSeqNum* (34) in the **Logon** (A) is the same as the client's expected inbound message sequence number, then the message transmission will resume as normal
7b	If the ASX's outbound *MsgSeqNum* (34) in the **Logon** (A) is not the same as the client's expected inbound message sequence number, then the client will send a **ResendRequest** (2) to request for a retransmission of messages. In **ResendRequest** (2), *BeginSeqNo* (7) = first message in range to be re-sent and *EndSeqNo* (16) = last message in range to be resent. If all messages after *BeginSeqNo* (7) are required, set EndSeqNo (16) = 0
8	Signal B FIX Gateway will start message retransmission as requested

2.4.2   How can clients request a retransmission of all messages that were sent on the current day?

Signal B clients can request a retransmission of all messages by sending a **ResendRequest** (2) message with *BeginSeqNo* (7) = 1 and *EndSeqNo* (16) = 0.

When there is a large number of messages to resend, the processing time can be lengthy. If the **ResendRequest** (2) message is sent close to the closing time, the request may not be fulfilled completely if the message retransmission time exceeds the closing time.

In production, clients may request for an extension of the closing time by contacting the ASX Information Services team Information.Services@asx.com.au or +61 2 9227 0422. A time extension must be requested at least 30 minutes prior to the standard closing time (i.e. by 20:00 AEST/AEDT) and ASX reserves the right to refuse the request.

It is not possible to extend the closing time of the ITE.

2.5   Testing

2.5.1   Which ASX Trade environment will the ITE be connected to?

The ITE will be connected to the ASX Trade CDE+ environment for testing, including conformance testing. Trading activity in CDE+ will flow through to the Signal B FIX service in ITE. ASX will ensure that trading PIDs are configured correctly on the Signal B FIX sessions to facilitate this flow.

Disclaimer

ASX Trade Marks