



Update: New Features in SAIL Protocol

TO: BOX Options Participants
FROM: BOX Market Operations Center
SUBJECT: Update: New Features in SAIL Protocol
DATE: November 19, 2024

On Monday, **December 23, 2024**, BOX Options Market LLC (“BOX”) will introduce the following enhancements to the SAIL protocol.¹

A new SAIL Protocol Version – **Version B8** – will be introduced to support these changes.

BOX Participants must leverage SAIL Protocol Version B8 to utilize the new features. Additionally, these changes are optional. If a Participant does not intend to leverage the enhancements, no modifications are required to their SAIL protocol versions.

1. New System Sequence ID Field

The SAIL Outgoing Messages Header will be modified to support a new field – **System Sequence ID** – detailed below.

The System Sequence ID provides an identifier which allows Participants to determine the order in which their original messages were processed by the BOX trading system for that particular trading slice. The identifier is unique per trading slice. It is present in all business messages sent by the Exchange to Participants. This field is encoded in Base62 on 6 alphanumeric characters and supports a value up to 9,999,999,999.

¹ BOX recently distributed [2024-053](#) which detailed enhancements to the SAIL protocol. This Notice provides an update on the enhancements and timeline.

New SAIL Outgoing Messages Header Format with System Sequence ID

Field Name	Field Type	Bytes	Required/Optional	Type
Message Type	Message Type	2	Required	Existing
Message Timestamp (Local) (Trading Engine Time)	Time	6	Required	Existing
User Sequence ID	User Sequence ID	8	Optional	Existing
Exchange Message ID	Exchange Message ID	6	Optional	Existing
Gap Sequence ID	Numeric	2	Required	Existing
System Sequence ID	Alphanumeric (right justified, left padded with zeroes)	6	Required	NEW

A complete list of impacted SAIL business messages can be found in the [SAIL Specifications Guide](#).

2. Extended SAIL Error Notice Message

The existing SAIL Error Notice (ER) Message will be updated with the below fields to include additional details of the error, where applicable.

New SAIL Error Message (ER) Format

Field Name	Field Type	Bytes	Required/Optional	Type
Outgoing Message Header (ER)		2	Required	Existing
Error Code	Error Code	4	Required	Existing
Error Description	String (100)	100	Required	Existing
Group	Group ID	2	Optional	NEW
Instrument	Instrument ID	4	Optional	NEW
Order ID	Order ID	8	Optional	NEW
Auction ID	Auction ID	6	Optional	NEW
Original Message Type	Message Type	2	Required	NEW
Error Detail	String (200)	200	Optional	NEW
Client Order ID	Client Order ID (20)	20	Optional	NEW

3. New 4 byte filler fields on Trade Messages

For future use, a new 4 byte filler field (zero filled) will be added to the end of the following trade messages:

- SailExecutionNotice (NT)
- SailLegExecutionNotice (NL)
- SailExecutionCancellationNotice (NX)
- SailLegExecutionCancellationNotice (NY)

2024-059

Technical Documentation

For supporting documentation concerning the changes to the SAIL protocol, please see

<https://boxoptions.com/assets/BOX-SAIL-Specifications-Guide-v2.24.pdf>

<https://boxoptions.com/assets/SAIL-BX-002E-BOX-SAIL-Business-Design-Guide-v3.4.pdf>

Test Environment

Participants who wish to test their applications for these changes may contact the BOX Market Operations Center to coordinate testing.

Contact

Please contact the BOX Market Operations Center at (866) 768-8845 or by e-mail at BOXMOC@boxoptions.com should you require additional information.