



Large Open Positions Reporting (LOPR)

LOPR SAIL Specifications Guide for Approved Participants

Document ID: LOPR-MR-002E
Document Version: 1.3
Publication Date: 2011-05-27

Equities

Toronto Stock Exchange
TSX Venture Exchange
Equicom

Derivatives

Montréal Exchange
CDCC
Montréal Climate Exchange

Fixed Income

Shorcan

Energy

NGX

Data

TMX Datalinx
PC Bond

Copyright

©Bourse de Montréal Inc., 2011

This document and all information contained herein is and will remain at all times proprietary and confidential information of Bourse de Montréal Inc.

No part of this document may be photocopied, reproduced, stored on retrieval system, or transmitted, in any form or by any means whether, electronic, mechanical, or otherwise without the prior written consent of Bourse de Montréal Inc.

The information included in this document is believed to be accurate. Bourse de Montréal Inc. does not guarantee the completeness or accuracy of any information included herein. This document is produced with the understanding that Bourse de Montréal Inc. is providing information and not in any way providing engineering or other professional services.

SOLA is a trademark of Bourse de Montréal Inc.

Bourse de Montréal Inc. reserves the right to change details in this publication without notice.

LOPR-MR-002E, Document Version 1.3

Document Authorizations

Author(s): Email:	William Applebee - APPW wapplebee@m-x.ca	
Reviewer(s)	N/A	N/A
Approver(s)	Vishal Chunnoo - CHUV	Functional Architect
Owner	Jean-Francois Bertrand – BERJ	Director, Architecture

Document History

Version	Date	Change Description
1.0	2011-01-14	First approved version for distribution
1.1	2011-04-12	Modification to Account Owner Type <ul style="list-style-type: none"> Change M = Sovereign Funds to CTA (Commodity Trading Advisor) Replace definition of Sovereign Funds with definition for Commodity Trading Advisor in section A.3
	2011-04-12	Modification to fields: <ul style="list-style-type: none"> State (modify length from 2 to 24) Account Type (modify value for Omnibus from 3 to O) Content Type (modify format and length from N(1) to A(2) and change value from 3 to EP) Owner Id (remove all reference to SIN, SSN, etc.) Modify length of Nbinstruments in BI Message from N(2) to N(4) Remove Content Type from Message KO Insert Postal Code after State in Message JY

Version	Date	Change Description
1.2	2011-05-04	<p>Modifications:</p> <ul style="list-style-type: none"> • Removed Trading Engine Time from Message Time Stamp field name in section 4.2 Outgoing Message Header • Changed Message 5.12 KO: Position Delimiter Acknowledgement to KO: Standard Acknowledgement, modified Enum List for MsgType field name in Chapter 7 Field Types • Verified Req/Opt column for 5.13 Account Summary was the same as KR: Account Acknowledgement • Addition of Appendix A sections for: <ul style="list-style-type: none"> • Account Ownership • Account Owner ID • Account Aggregation • Removed all occurrences of Normalized Owner Id from Business Messages and Chapter 7 Field Types
1.3	2011-05-027	<p>Modifications in Chapter 7 Field Types (indicated by Change Bars):</p> <ul style="list-style-type: none"> • Changed value of 'Omnibus' from 0 to 3 in field name 'Account Type' • Updated text of 'mantis' to 'mantissa' in the description column of the field name 'Price'

Document Notes

Date	Description

Typographic Conventions

Convention	Meaning
Abbreviated menu commands	This document uses abbreviated menu. For example, "Click Display > Toolbars > Standard " means that you should click the Display menu, point to Toolbars , and click the Standard entry.
Boldface type	Boldface type is used for commands, keywords, file names URLs, or other information that you must use literally. Name of windows, dialogs, and other controls also appear in boldface type.
Initial Capital Letters	The first letter of the names of menus, dialog boxes, dialog box elements, and commands are capitalized.
<Text in angle brackets>	Angle brackets are used for variables and values that you must provide.
Emphasized type	Emphasized type is used for words and phrases that need to be emphasized, as for new terms defined in the text. Italicized type is also used for foreign languages terms.
Monospace	Code and script examples appear in a monospace font.
Plus sign in text	Keyboard shortcuts are indicated by a plus sign separating key names. For example, Ctrl+F1 means that you must press the Ctrl and F1 keys at the same time.

Table Of Contents

Chapter 1 — Introduction	1
1.1 – Purpose	1
1.2 – Scope	1
Chapter 2 — Overview	3
2.1 – Introduction.....	3
2.2 – Message Format and Delivery	3
2.2.1 – Message Format	3
2.3 – Required Fields	3
Chapter 3 — Technical Messages	5
3.1 – TC: User Connection.....	5
3.2 – TK: Connection Acknowledgement	5
3.3 – TD: User Disconnection	6
3.4 – TH: Heartbeat (Question)	6
3.5 – TI: Heartbeat (Response).....	6
3.6 – TO: Out of Sequence	7
3.7 – TE: Technical Error Notice	7
3.8 – TL: Disconnection Acknowledgement	8
3.9 – TT: End of Transmission	8
Chapter 4 — Message Headers.....	9
4.1 – Incoming Messages Header.....	9
4.2 – Outgoing Messages Header.....	9
Chapter 5 — Business Messages.....	11
5.1 – AN: Account Entry	11
5.2 – KR: Account Acknowledgement	12
5.3 – AD: Account Delete	13
5.4 – KA: Account Delete Acknowledgement.....	13
5.5 – BI: Bulk Instrument.....	13
5.6 – PN: Position Entry	14
5.7 – KB: Position Acknowledgement	14
5.8 – PD: Position Delete	15
5.9 – KF: Position Delete Acknowledgement	15
5.10 – ER: Error Notice	16
5.11 – PU: Position Delimiter	16
5.12 – KO: Standard Acknowledgement	16
5.13 – JY: Account Summary.....	17

Chapter 6 — Error Codes	19
Chapter 7 — Field Types	21
Appendix A — Terms, Acronyms & Definitions	27
A.1 – Terminology	27
A.2 – Acronyms	27
A.3 – Account Owner Types.....	27
A.4 – Account Types	28
A.5 – Account Ownership.....	29
A.6 – Account Owner Id	29
A.7 – Account Aggregation.....	31

Chapter 1 Introduction

1.1 Purpose

The Large Open Positions Reporting (LOPR) SAIL Specifications Guide is a technical document that describes a subset of the MX SOLA[®] Access Information Language (SAIL) Protocol developed by the Information Technology (IT) division of the Montréal Exchange Inc., a member of the TMX Group Inc.

Authorized Participants will use this protocol to connect to the SAIL Front-End to send accounts and positions to the Montréal Exchange Inc. - Regulatory (MX-R) on a daily basis.

This subset of the SAIL Protocol will introduce new messages that will be required for the management of account and position data.

1.2 Scope

The scope of this document is to provide a detailed description of the subset of the SAIL Protocol that Authorized Participants will use to send account and position data to the Montréal Exchange Inc. - Regulatory (MX-R). This includes but is not limited to:

- Message Format and Delivery
- Session Protocol
- Application Messages which include:
 - Technical Messages
 - Business Messages
 - Error Messages

This document provides information and does not in any way provide engineering or other professional services.

Chapter 2 Overview

2.1 Introduction

The subset of the SAIL Protocol will introduce new SAIL messages that are required to manage position and account information. The SAIL Protocol is defined at two levels: Technical and Business. The technical level deals with the delivery of the data, while the business level defines business related data content. This document is organized to reflect the distinction.

2.2 Message Format and Delivery

The following sections summarize general specifications for constructing and transmitting MX SOLA[®] Access Information Language Protocol messages.

2.2.1 Message Format

All technical and business SAIL messages start with 4 bytes of Endian coded message length. An End of Text (ETX) binary 3 is added after the last character of each business message, and it is padded with spaces of 4 bytes for alignment.

Example:

```
Message: <21>xxxxxxxxxxxxxxxxxxxxxx<ETX>< >
<0021> (4 bytes) length of business message. Codification Little Endian.
<xxxxxxxxxxxxxxxxxxxxxx>: (21 bytes) Business Message body
<ETX>: (1 byte) End of Text, binary 3
< > 2 spaces for alignment
```

2.3 Required Fields

Each message within the protocol is comprised of fields which are either:

- R = Required
- O = Optional
- C = Conditional (fields which are required based on the value of other fields)

Note: Systems should be designed to operate only when the required and conditionally required fields are present.

Chapter 3 Technical Messages

This chapter defines the SAIL Technical Messages that are required by the subset of the SAIL Protocol to connect to the SAIL Front End.

3.1 TC: User Connection

Incoming

User Connection is the first message to be sent by either the Authorized Participant (AP) or MX-R staff.

FIELD NAME		FIELD TYPE	REQ / OPT
Incoming Messages Header (Message Type = TC)		Incoming Messages Header	R
Protocol Version		Protocol	R
User ID		User ID	R
Password (MD5 Encryption)		Password	R
Session ID		Session ID	O
Time (HHMMSS)		Time	R
Exchange Message ID		Exchange Message ID	O
Inactivity Interval		Inactivity Interval	O
Number of Message types to be received ¹		Numeric (2)	R
(1 to 99 occurrences)	Message types to be received ²	MsgType	R

1. Authorized Participant indicates the number of message types to be received

2. Authorized Participant indicates the message types to be received

3.2 TK: Connection Acknowledgement

Outgoing

This message is sent to acknowledge receipt of a TC: User Connection message.

FIELD NAME		FIELD TYPE	REQ / OPT
Incoming Messages Header (Message Type = TK)		Outgoing Messages Header	R
Current Session ID		Session ID	R
Last User Sequence ID received		User Sequence ID	O

3.3 TD: User Disconnection

Incoming

The User Disconnection message is sent by the Participant to the Exchange when it wants to disconnect from the system.

FIELD NAME	FIELD TYPE	REQ / OPT
Incoming Messages Header (Message Type = TD)	Incoming Messages Header	R
User ID	User ID	R
Session ID	Session ID	O

3.4 TH: Heartbeat (Question)

Outgoing

This message is sent by the exchange to the participant at the beginning of every Heartbeat period.

This message indicates the first message to be processed in the Heartbeat period. If there is no pending message from the participant, the field User Sequence ID represents the next expected User Sequence ID.

FIELD NAME	FIELD TYPE	REQ / OPT
Incoming Messages Header (Message Type = TH)	Outgoing Messages Header	R
User Sequence ID (first User Sequence ID for next/current Heartbeat period)	User Sequence ID	R
Last Exchange Message ID (sent to Participant)	Exchange Message ID	R
Time (Local)	Time	R

3.5 TI: Heartbeat (Response)

Incoming

A Heartbeat message sent by the exchange to the participant at the beginning of every Heartbeat period must receive a response from the participant application within 'n' units specified in the Connection message. The response can be any message. If a Heartbeat is not responded to, the participant is considered as not connected and is automatically disconnected by the system.

Message TI is used to respond to a Heartbeat (TH message) if no other message needs to be sent.

This message has the same number of bytes and format as TH: Heartbeat (Question).

Message type must be TI, while other values can be the same as last received TH message.

3.6 TO: Out of Sequence

Outgoing

This message is sent by the exchange when the User Sequence ID in the message is out of sequence. Participant must reconnect.

FIELD NAME	FIELD TYPE	REQ / OPT
Incoming Messages Header (Message Type = TO)	Outgoing Messages Header	R
Received User Sequence ID	User Sequence ID	R
Expected Last User Sequence ID ¹	User Sequence ID	R
Message Time (Local)	Time	R

1. The system indicates what the User Sequence Id should have been.

3.7 TE: Technical Error Notice

Outgoing

The message is sent by the exchange when a technical error is encountered in the message sent by the Participant.

FIELD NAME	FIELD TYPE	REQ / OPT
Incoming Messages Header (Message Type = TE)	Outgoing Messages Header	R
Received Message Type ¹	MsgType	R
Preceding User Sequence ID received (zeroes if none)	User Sequence ID	R
Error Code	Error Code	R
Error Message	Error Message	R
Start of message in error	Error Message	R

1. The system indicates the message type received that has resulted in an error.

3.8 TL: Disconnection Acknowledgement

Outgoing

This message is sent to acknowledge receipt of a [TD: User Disconnection](#) message.

3.9 TT: End of Transmission

Outgoing

This message is sent to indicate that the session's transmission is completed. Participant is disconnected.

FIELD NAME	FIELD TYPE	REQ / OPT
Incoming Messages Header (Message Type = TT)	Outgoing Messages Header	R
Ended Session ID	Session ID	R
Last User Sequence ID received Note: If no business message has been received on this connection, this field is equal to zeroes.	User Sequence ID	
Time	Time	R

Chapter 4 Message Headers

This chapter defines the Message Headers that are either required on all incoming or outgoing messages.

4.1 Incoming Messages Header

Size: 24

This is the header required on all incoming Participant business messages.

FIELD NAME	FIELD TYPE	REQ / OPT
Message Type	MsgType	R
User Time (Local)	Time	R
Filler (Blank)	String (8)	R
User Sequence ID	User Sequence ID	R

User Sequence ID

This field contains a unique sequential number that the Participant must set in all business messages. The first business message must have this number set to 1, the second set to 2, and so on.

4.2 Outgoing Messages Header

Size: 24

This is the header included on all outgoing Exchange messages.

FIELD NAME	FIELD TYPE	REQ / OPT
Message Type	MsgType	R
Message Timestamp (Local)	Time	R
User Sequence ID ¹	User Sequence ID	O
Exchange Message ID	Exchange Message ID	O
Gap Sequence ID	Gap Sequence ID	R

1. Contains the same User Sequence ID as in the Incoming Message Header, and is set for acknowledgement only.

Chapter 5 Business Messages

This chapter defines the new Business messages for the reporting of positions and account information that are required by the subset of the SAIL Protocol for LOPR.

5.1 AN: Account Entry

Incoming

This message is used to enter client account details in the system.

FIELD NAME	FIELD TYPE	REQ / OPT
Incoming Messages Header (Message Type = AN)	Incoming Messages Header	R
Filler	String (1)	R
Affiliated Cie	Affiliated Cie	O
Account Number	Account Number	R
Account Type	Account Type	R
Account Owner Type	Account Owner Type	R
OwnerId	Owner Id	C
Hedge Spec	Hedge Spec	R
Name	Name	R
Address	Address	R
City	City	R
State	State	R
Postal Code	Zip Postal Code	R
Phone	Phone	O
Fax	Fax	O
Email	Email	O
Country Code	Country Code	R
Filler	String (4)	R

5.2 KR: Account Acknowledgement

Outgoing

This message is used to acknowledge the successful entry of an account.

FIELD NAME	FIELD TYPE	REQ / OPT
Outgoing Message Header (Message Type = KR)	Outgoing Messages Header	R
Filler	String (1)	R
Affiliated Cie	Affiliated Cie	O
Account Number	Account Number	R
Account Type	Account Type	R
Account Owner Type	Account Owner Type	R
OwnerId	Owner Id	C
Hedge Spec	Hedge Spec	R
Name	Name	R
Address	Address	R
City	City	R
State	State	R
Postal Code	Zip Postal Code	R
Phone	Phone	O
Fax	Fax	O
Email	Email	O
Country Code	Country Code	R
Filler	String (4)	R
Response Status	Response Status	R
Filler	String (33)	R

5.3 AD: Account Delete

Incoming

This message is used to request the deletion of an account.

FIELD NAME	FIELD TYPE	REQ / OPT
Incoming Messages Header (Message Type = AD)	Incoming Messages Header	R
Account Number	Account Number	R
Filler	String (16)	R

5.4 KA: Account Delete Acknowledgement

Outgoing

This message is used to acknowledge the request to delete an account.

FIELD NAME	FIELD TYPE	REQ / OPT
Outgoing Messages Header (Message Type = KA)	Outgoing Messages Header	R
Account Number	Account Number	R
Filler	String (36)	R

5.5 BI: Bulk Instrument

Outgoing

This message is used to transmit the list of SOLA Instruments if a Participant has requested the BI message in his connection message (TC).

FIELD NAME	FIELD TYPE	REQ / OPT
Outgoing Messages Header (Message Type = BI)	Outgoing Messages Header	R
NbInstruments	Numeric (4)	R

FIELD NAME		FIELD TYPE	REQ / OPT
Group Instrument Definition Array NbInstrument Occurrences (max 32)	Group	Group ID	R
	Instrument	Instrument ID	R
	Call Put Code	Call Put Code	R
	Strike Price	Price	R
	Expiration Date	Date	R
	Class Symbol	Class Symbol	R
	External Symbol	External Symbol	R

5.6 PN: Position Entry

Incoming

This message is used to enter position details for an instrument.

FIELD NAME	FIELD TYPE	REQ / OPT
Incoming Messages Header (Message Type = PN)	Incoming Messages Header	R
Report Date	Date	R
Filler	String (1)	R
Account Number	Account Number	R
Group	Group ID	R
Instrument	Instrument ID	R
Long Quantity	Quantity	R
Short Quantity	Quantity	R

5.7 KB: Position Acknowledgement

Outgoing

This message is used to acknowledge the entry of position details for an instrument.

FIELD NAME	FIELD TYPE	REQ / OPT
Outgoing Message Header (Message Type = KB)	Outgoing Messages Header	R
Report Date	Date	R
Filler	String (1)	R
Account Number	Account Number	R
Group	Group ID	R

FIELD NAME	FIELD TYPE	REQ / OPT
Instrument	Instrument ID	R
Long Quantity	Quantity	R
Short Quantity	Quantity	R
Response Status	Response Status	R
Filler	String (36)	R

5.8 PD: Position Delete

Incoming

This message is used to request the deletion of a specific position on an instrument for a given account.

FIELD NAME	FIELD TYPE	REQ / OPT
Incoming Messages Header (Message Type = PD)	Incoming Messages Header	R
Account Number	Account Number	R
Group	Group ID	R
Instrument	Instrument ID	R

5.9 KF: Position Delete Acknowledgement

Outgoing

This message is used to acknowledge a request to delete position details for a client.

FIELD NAME	FIELD TYPE	REQ / OPT
Outgoing Message Header (Message Type = KF)	Outgoing Messages Header	R
Account Number	Account Number	R
Group	Group ID	R
Instrument	Instrument ID	R
Filler	String (36)	R

5.10 ER: Error Notice

Outgoing

This message is an error notification. It is sent in response to a message from the Participant when the system cannot process it.

FIELD NAME	FIELD TYPE	REQ / OPT
Outgoing Message Header (Message Type = ER)	Outgoing Messages Header	R
Error Code	Error Code	R
Error Description	Error Message	R

5.11 PU: Position Delimiter

Incoming

This message is used to indicate the end of Position Entry messages.

Note: If the AP has no positions to enter, a PU message must be sent in any case. Failure to do so will be interpreted that the AP has forgotten to report positions for the day.

FIELD NAME	FIELD TYPE	REQ / OPT
Incoming Messages Header (Message Type = PU)	Incoming Messages Header	R
Content Type	Content Type	R

5.12 KO: Standard Acknowledgement

Outgoing

This message acknowledges the receipt of a PU: Positions Delimiter message.

FIELD NAME	FIELD TYPE	REQ / OPT
Outgoing Message Header (Message Type = KO)	Outgoing Messages Header	R

5.13 JY: Account Summary

Outgoing

This summary message is sent at the start and end of each day to give a snapshot of all active accounts at these specific times.

FIELD NAME	FIELD TYPE	REQ / OPT
Outgoing Message Header (Message Type = JY)	Outgoing Messages Header	R
Filler	String (1)	R
Affiliated Cie	Affiliated Cie	O
Account Number	Account Number	R
Account Type	Account Type	R
Account Owner Type	Account Owner Type	R
OwnerId	Owner Id	C
Hedge Spec	Hedge Spec	R
Name	Name	R
Address	Address	R
City	City	R
State	State	R
Postal Code	Zip Postal Code	R
Phone	Phone	O
Fax	Fax	O
Email	Email	O
Country Code	Country Code	R
Filler	String (4)	R
Response Status	Response Status	R
Filler	String (33)	R
Summary Status	Summary Status	R

Chapter 6 Error Codes

The following table displays the error codes and text that will appear in error responses:

ERROR CODE	ERROR TEXT
14	Syntax Error
1001	Instrument does not exist
1009	Action not allowed under current configuration
5001	Report date is invalid
5002	Position Rejected: Account number does not exist
5003	Account Operation is invalid
5004	Account Id is invalid
5005	Syntax Error: Owner Id is empty

Chapter 7 Field Types

The following table displays the format, length, and description for each field type. value lists (Enum) are also listed within the Description column.

Under the Format column note that:

- A = Alphabetic
- N = Numeric
- X = Alphanumeric

FIELD NAME	FORMAT	LGTH	DESCRIPTION
Account Number	X	16	Account number of the owner at the Approved Participant system.
Account Owner Type	A	1	Type of owner (for Owner Type definitions, refer to A.3, Account Owner Types on page 27) Allowable Values are: A = Canadian Bank B = Foreign Bank C = Canadian Broker D = Foreign Broker E = Fund Manager F = Pension Fund G = Government and State Owned Companies H = Retail Client I = Insurance Company J = Miscellaneous K = Hedge Funds L = Mutual Funds M = CTA (Commodity Trading Advisor) N = Corporate O = Proprietary Trading Firms Primarily Algorithmic P = Proprietary Trading Firms Local

FIELD NAME	FORMAT	LGTH	DESCRIPTION
Account Type	X	1	Type of account (for Account Type definitions, refer to A.4, Account Types on page 28 Acceptable values are: 1 = Client 2 = Firm 8 = Market Maker 3 = Omnibus 4 = Professional
Address	X	48	Account Owner Address
Affiliated Cie	X	24	If the Account Owner has affiliations to a company, the company name is indicated.
Call Put Code	A	1	Acceptable values are: C = Call P = Put
City	A	24	Account Owner City
Class Symbol	X	20	Symbol for all series of an Option or Ticker Symbol for a Future
Content Type	A	2	Acceptable value is: EP = End of Position Declaration
Country Code	X	2	Account Owner Country Code
Date	N	8	Acceptable format: YYYYMMDD (year, month, day)
Email	X	48	Account Owner Email Address
Error Code	N	4	For detail descriptions of Error Codes, refer to Chapter 6, Error Codes
Error Message	A	100	First 100 characters of the error message
Exchange Message ID	X	6	It represents the exchange identifier of the message for the current session. It is used in a Connection message as a retransmission starting point. Acceptable values are: Spaces = field not subject to re-transmission Zeroes = start from 1st message of the session Blanks = start from next message for Participant. Note: If valid Exchange Message ID, start at this message ID or the next message for the Participant.

FIELD NAME	FORMAT	LGTH	DESCRIPTION
External Symbol	X	30	Identification of a SOLA Instrument by MX
Fax	N	24	Account Owner Fax Number
Gap Sequence ID	N	2	A numeric sequence (base 10) used to track gaps, running from 0 to 99 over and over. Note: If the Participant detects a gap, he has to reconnect with a User Connection message
Group ID	X	2	Group identification within the system and is composed of instruments.
Hedge Spec	A	1	Acceptable values are: H = Hedger S = Speculator
Inactivity Interval	N	2	Number of missed heartbeats before considering the user disconnected. Note: If set to 0, the user is never considered as disconnected by the system.
Instrument ID	X	4	Instrument identification within a Group
Message Time Stamp	N	6	Acceptable format: HHMMSS (hour, minute, second)

FIELD NAME	FORMAT	LGTH	DESCRIPTION
MsgType	A	2	<p>Message Type indicator for Business Messages Acceptable values are:</p> <p>AN = Account Entry AD = Account Delete BI = Bulk Instrument ER = Error Notice JY = Account Summary KA = Account Delete Acknowledgement KB = Position Acknowledgement KF = Position Delete Acknowledgement KO = Standard Acknowledgement KR = Account Acknowledgement PD = Position Delete PN = Position Entry PU = Position Delimiter</p> <p>Message Type indicator for Technical Messages Acceptable values are:</p> <p>TC = User Connection TK = Connection Acknowledgement TD = User Disconnection TH = Heartbeat (Question) TI = Heartbeat (Response) TO = Out of Sequence TE = Technical Error Notice TL = Disconnection Acknowledgement TT = End of Transmission</p>
Name	A	25	Account Owner Name Refer to A.5, Account Ownership on page 29
Owner Id	X	24	Account Owner's unique identification. Refer to A.6, Account Owner Id on page 29
Password	X	8	Used in conjunction with User ID to access system. See Technical Help Desk for details
Phone	N	24	Account Owner Phone Number

FIELD NAME	FORMAT	LGTH	DESCRIPTION
Price	X	10	<p>Price format with format indicator and price mantissa.</p> <p>Format indicator (1): If the format indicator is Alpha, it means that the price is negative (A means negative value with no decimal, B means negative value with 1 decimal, C means negative value with 2 decimals, etc.). If the format indicator is Numeric, it means that the price is positive (0 means positive value with no decimal, 1 means positive value with one decimal, 2 means positive value with 2 decimals, etc.). If the format indicator is set to spaces, it means that the price is not significant.</p> <p>Price mantissa (9): The mantissa represents the price value including the number of decimals defined in the format indicator.</p> <p>Examples: Format indicator = 2; Price mantissa = 3509438; Price = 35094.38 Format indicator = A; Price mantissa = 3567838; Price = -3567838 Format indicator = ; Price mantissa = 3567838; Price = not significant</p>
Protocol	X	2	<p>Protocol ID. A0 is baseline version.</p>
Quantity	N	8	Number of contracts or shares.
Response Status	A	1	<p>Acceptable values are: C = Entry Created U = Entry is Updated</p>
Session ID	X	4	<p>Current Session Identification Spaces = The Participant wants to connect to the current session ID.</p>
State	A	24	Account Owner State
Summary Status	A	1	<p>Identifies either the Start or End of day. Acceptable values are: S = Start-of-Day E = End-of-Day</p>

FIELD NAME	FORMAT	LGTH	DESCRIPTION
Time	N	6	Acceptable format: HHMMSS (hour, minute, second)
User ID	X	8	Identifies a user for a connection, and must be registered in the SOLA® Configuration Database
User Sequence ID	N	8	Identifies all incoming business messages for one connection. Field must be sequential and start at 1 at the beginning of the day. Used to track gaps in message sequence.
User Time	N	6	Acceptable format: HHMMSS (hour, minute, second)
Zip Postal Code	X	12	Account Owner Postal Code

Appendix A Terms, Acronyms & Definitions

A.1 Terminology

The following table defines some of the terms that are used in this document.

TERM	DEFINITION
Incoming	Message from Participant to Exchange
Outgoing	Message from Exchange to Participant

A.2 Acronyms

The following table defines some of the acronyms that are used in this document.

ACRONYM	DEFINITION
ID	Identification
ETX	End-of-Text
LOPR	Large Open Position Reporting
MX	Montréal Exchange Inc.
MX-R	Montréal Exchange Inc. - Regulatory
SAIL	SOLA [®] Access Information Language

A.3 Account Owner Types

ACCOUNT OWNER TYPE	DEFINITION
Canadian Bank	A Schedule 'A' Bank or Credit Union.
Foreign Bank	A Schedule 'B' Bank or a bank based outside Canada.
Canadian Broker	A Broker based in Canada that is a member of IIROC.
Foreign Broker	A Broker based outside Canada.
Fund Manager	A professional who manages various securities and assets to meet his or her clients' specified investment goals (e.g., pool operator, options advisor).
Pension Fund	Any plan, fund (including pension fund of government-owned corporation or State-owned enterprise), or program that provides retirement income to employees or that includes schemes that result in a deferral of income by employees.

ACCOUNT OWNER TYPE	DEFINITION
Government and State Owned Companies	A Government Ministry or a legal entity created by a government to undertake commercial activities for an owner government.
Retail Client	Generally refers to individuals, families and small businesses.
Insurance Company	A company that provides insurance coverage to a person or entity that buys an insurance policy.
Miscellaneous	Refers to all other client types.
Hedge Funds	An investment fund open to a limited number of investors, and that takes on investments that carry a higher degree of risk than the risk taken by traditional investment funds.
Mutual Funds	A professionally managed investment scheme that pools money from investors and that invests it in various investment securities.
CTA (Commodity Trading Advisor)	An asset manager or a firm that invests in the futures market.
Corporate	An entity that is engaged in a commercial activity (other than portfolio management and other than Financial institutions, brokers and Government - owned corporation) that is granted a charter recognizing it as a separate legal entity which has its own rights, privileges, and liabilities and which are distinct from those of its shareholders.
Proprietary Trading Firms Primarily Algorithmic	A Trader who trades primarily for his or her own account using a computer programmed with an algorithm.
Proprietary Trading Firms Local	A Trader who trades primarily for his or her own account.

A.4 Account Types

ACCOUNT TYPE	DEFINITION
Client	Means an order for a security or a derivative instrument entered for the account of a customer of any Approved Participant, or of a customer of a related firm of an Approved Participant, but does not include an order entered for an account in which an Approved Participant, a related firm of an Approved Participant, a person approved by the Bourse or a restricted trading permit holder has a direct or indirect interest, other than an interest in a commission charged.
Firm	Means an order for a security or a derivative instrument for an account in which the Approved Participant or a related firm of the Approved Participant has a direct or indirect interest, other than an interest in a commission charged.

ACCOUNT TYPE	DEFINITION
Market Maker	An account established by an Approved Participant that is confined to transactions executed by and positions carried by the Approved Participant on behalf of a Market-Maker.
Omnibus	An account held in the name of an entity or person which may be utilized for recording and clearing the trades of two or more undisclosed customers of the account holder.
Professional	Means an order for a security or a derivative instrument for an account in which a director, officer, partner, employee or agent of an Approved Participant or of a related firm of the Approved Participant, a person approved by the Bourse or a restricted trading permit holder has a direct or indirect interest, other than an interest in a commission charged. The Bourse may designate any order as being an order for the account of a professional if, in its opinion, circumstances justify it.

A.5 Account Ownership

For the purposes of the LOPR project, the account ownership shall be determined by applying the following subsequent steps:

- A. Person or entity that has more than 50% ownership interest in the account,
- B. Name of the account (e.g. Mr. and Mrs. Smith, ABC Investment club),

It is the approved participants' responsibility to determine account ownership based on the information that has been or can be provided by the account owner(s). In case of doubt, approved participants should not hesitate to communicate with the Division to assist them in determining whether or not accounts should be considered as having the same owner(s).

Please note that the Account Owner "Name" field can accommodate up to 25 characters. If the full account owner name should exceed 25 characters, use abbreviations which best describes the entity. (Do not hesitate to contact the Regulatory division for guidance).

A.6 Account Owner Id

The Account Owner ID field will allow the Division to assign a unique identifier to a beneficial account owner in order to aggregate positions through different account numbers across all approved participants for each said account owner. For more information on aggregating positions, refer to [A.7, Account Aggregation on page 31](#)

The following guidelines are to be used when populating the Account Owner ID field for LOPR with possible escalation when there is a legitimate unavailability of the required information:

- A. For an account in the name of an individual or of a registered or corporate entity owned exclusively by this individual :

The Account Owner ID unique identifier that must be used are:

- For Canadian residents: last 4 digits of the Social Insurance Number (SIN)
- For U.S. residents : Social Security Number (SSN)
- For other countries residents: similar number such as, for example, tax identification number

If, and only if, the above identifiers are unavailable, approved participants will be allowed to use one of the following identifiers:

1. Internal identifier used by the approved participant to link accounts belonging to the same beneficial account owner within the firm.
2. Account owner's last name

- B. For an account belonging to multiple individuals (partnerships, joint accounts, investment clubs, registered entities other than corporations, etc) :

1. If one of the account owners holds an ownership interest of more than 50% in the account, then use the succession of identifiers found in A) above related to this account owner.
2. For all other circumstances populate field with account's name (e.g. Mr. & Mrs. Smith, ABC Investment club etc.). Please note that the Account Owner ID field can accommodate up to 24 characters. If the full account name should exceed 24 characters, create an acronym from the entity's legal name. (Do not hesitate to contact the Regulatory division for guidance).

- C. For an account belonging to a Corporation other than a Corporation 100% owned by one individual (see A) above:

1. If the corporation is more than 50% owned by an individual, then use the succession of identifiers found in A) above related to this account owner.
2. If the corporation is more than 50% owned by another corporation, then use the incorporation number of the controlling corporation.
3. For other cases, the Account Owner unique identifier that must be used is the incorporation number of the corporation in whose name the account is opened.

If, and only if, the above identifiers are not available, approved participants will be allowed to use one of the following identifiers:

1. Internal identifier used by the approved participant to link accounts belonging to the same beneficial account owner within the firm.
2. Account owner corporate legal name. Please note that the Account Owner ID field can accommodate up to 24 characters. If the full account owner corporate legal name should exceed 24 characters create an acronym from the legal name. (Do not hesitate to contact the Regulatory division for guidance).

- D. For any account not covered in sections A) B) or C)

1. Registration number (e.g.: charitable organization)

2. Internal identifier used by the approved participant to link accounts belonging to the same beneficial account owner within the firm.
3. Account owner legal name. Please note that the Account Owner ID field can accommodate up to 24 characters. If the full account owner legal name should exceed 24 characters create an acronym from the legal name. (Do not hesitate to contact the Regulatory division for guidance).

A.7 Account Aggregation

In order to determine if the reporting threshold is attained, approved participants must aggregate positions belonging to the same beneficial account owner as previously defined in sections 1 and 2 above.

The following guidelines are to be used when aggregating by beneficial Account Owner for LOPR:

- A. Aggregate positions for all accounts in the name of an individual and for all registered or corporate entities owned exclusively by that single individual.
- B. For accounts belonging to multiple individuals (partnerships, joint accounts, investment clubs, registered entities other than corporations, etc), aggregate positions to the account owner who holds an ownership interest of more than 50% in the account.
- C. For accounts belonging to a corporation, other than 100% owned by one individual, or any other entity, aggregation of position shall be done by beneficial ownership of the account.

In all cases, aggregation of positions shall be done by beneficial account owner as determined by the approved participant and/or its clients and/or its account owners directly. Accounts traded by registered persons pursuant to some discretionary trading authorization such as managed accounts and discretionary (carte blanche) accounts must not be aggregated except for those accounts that have a common beneficial owner.

Once it has been determined that the reporting threshold has been attained for a beneficial account owner after aggregating all positions held in his accounts, each of these accounts containing positions must be reported separately in LOPR.

Example: same account owner (Mr. X) may have multiple accounts

RRSP: Long 50 CALL RIM @ 50 JUN 11

TFSA : Long 200 PUT RIM @ 52 SEP 11

Margin CDN: Long 50 CALL RIM @ 60 JAN 12

Although the accounts taken individually do not meet the reporting threshold, once aggregated by account owner (Mr. X) the cumulative open position exceeds the reporting threshold (300 total open contracts on same underlying). Therefore, each of the three accounts above must be reported and this in a separate manner.



Montréal Exchange Inc..
Tour de la Bourse,
P.O. Box 61, 800 Victoria Square
Montréal, Quebec H4Z 1A9
Canada

phone: 514.871.2424
toll free: 1.800.361.5353
fax: 514.871.3584
e-mail: SAMSUPPORT@m-x.ca
website: www.m-x.ca