Technical Notice 21-007

Clearing API protocol Updates

Bourse de Montréal Inc. (the "Bourse") shall introduce its Average Pricing System (APS) via the update of the Clearing API protocol starting on November 1st of 2021. For more information on the APS feature please consult the notice of the original launch in October 2020.

This technical notice aims to provide an overview of the upcoming changes on the Clearing API protocol. For detailed information on the protocol updates please consult the Clearing Access Services Messaging Protocol Guide V1.15

IMPORTANT REMINDER

- **Any client of the Bourse's *Trade Management* application wishing to participate in APS must upgrade to the new TMS version v14.16.4.0 as per previously issued Technical Notice 20-014:Average Pricing System-Update II.** Previous TMS versions do not display the updated allocation price and the new APS related columns following the processing of an APS group.

- ClearingApi users must be configured on the MX side in order to process APS trades and receive prices with 7 digits resolution.

CLEARING API

The changes to the ClearingAPI protocol specifications are summarized as follow:

- **PricingGroupInstruction** New message type definition

Note : New tags introduced: 6204, 6205 and 626

Message	Field	Tag	Req	Data Type	Comments
PricingGroup Instruction	Standard Message Header		R		[MsgType 35=Up]
PricingGroup Instruction	Operation	6204	R	char	0 = Add trades to pricing group 2 = Remove trades from pricing group
PricingGroup Instruction	AllocationSymbol	6147	R	String	--
PricingGroup Instruction	Side	54	R	char	Side of order ● 1: Buy ● 2: Sell
PricingGroup Instruction	PricingGroupName	820	R	String of up to 20 characters	When adding trades to a Pricing Group, indicate the PricingGroupName where trades will be added. When removing trades from a Pricing Group, indicates the actual PricingGroupName of the trades in the trade list. String of up to 20 characters
PricingGroup Instruction	PricingGroupAlgo	6201	R	char	'W' = Weighted average price
PricingGroup Instruction	AllocType	626	R	String	Indicates if the Trade List of the operation is complete. When incomplete is used, another message with the Complete AllocType must be received before the operation is processed. 12 = Incomplete command 13 = Complete command
PricingGroup Instruction	Number of trades	6205	R	Int	Refers to the number of trades included in the Trade List Repeating Block below
Trade List Repeating Block (1 to 500 occurrences)					
PricingGroup Instruction	TradeAllocReportId	5190	R	String	TradeAllocReportId of the trade to be added to / removed from the pricing group. Only trade

					records (ClearingType = 2) can be used.
PricingGroup Instruction	Standard Message Trailer		R		

- **TradeReport** message modification
  - o Adding new Tag 6202 (PricingGroupEligible) and tag 6203 (PricingGroupLock)
  - o Indicate AllocationPrice (Tag 503) can have up to 7 digits
  - o Revised Required column for tags 201, 6098, 510, 37, 6001, 79, 5193, 6201 to indicate tags that may not be present (Not required).

Message	Field	Tag	Req	Data Type	Change Description
TradeReport	PutOrCall	201	C	int	This field is not sent when the ClassModel field is a Future
TradeReport	AllocationPrice	503	R	Price	Increased to 7 decimals
TradeReport	ErrorDescription	6098	N	String	--
TradeReport	OriginalAllocationPrice	510	C	Price	Indicates original allocation price, before applying the allocation group pricing algorithm (see AllocationPricingGroupAlgo)
TradeReport	OrderID	37	N	String	Unique identifier for Order as assigned by broker. Optional, may not be present.
TradeReport	PricingGroupAlgo	6201	N	char	Indicates the pricing algorithm applied to the allocation price.
TradeReport	PricingGroupEligible	6202	N	Boolean	New field Only populated when ClearingType = 2 (Trade) ● Y ● N Indicates if the trade is eligible for use in a PricingGroup. Not all product types and trade types are eligible for a PricingGroup operation.

TradeReport	PricingGroupLock	6203	N	Boolean	New field Only populated when ClearingType = 2 (Trade) ● Y ● N Indicates if the trade currently creates a PricingGroup Lock. A Lock condition occurs when the trade has been Given Up to another firm. A PricingGroup containing at least one locked trade cannot be modified anymore. A Lock trade cannot be added to a PricingGroup.
TradeReport	GiveUpFirm	6001	N	String	--
TradeReport	AllocAccount	79	N	String	Sub-account mnemonic
TradeReport	InstAct	5193	R	char	Used to manage incoming trades at the client level when the client receives a report

TIMELINE

Clearing API APS User Acceptance Testing (GTE)	September 1st, 2021
Clearing API APS GO LIVE	November 1st, 2021
Post-Trade Web Application User Guide	Already available in www.tmxwebstore.com
Clearing Access Services Messaging Protocol Guide V1.15	Already available in www.tmxwebstore.com

Please direct any question, comment or request for additional information, to our Technical Support Desk.

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