

iLink 3 CPT Reconciliation

This topic describes logic for reconciling the order entry iLink 3 trade messages to the corresponding CPT FIX trade capture reports and CPT TOF deal tickets

To link each trade execution across CME Globex and through EBS Central Post Trade, customers must align the value in iLink 3 tag 1797-OrderEventExecID with the value in CPT FIX tag 1003-TradeID / CPT TOF User Defined Field DEAL_REF_NUM.

iLink 3 tag 1797-OrderEventExecID, which is found in the tag 1795-NoOrderEvents repeating group, is equivalent to the unique Deal ID in Ai. iLink 3 can report multiple trades in a single Execution Report message; it is critical to make the change to use tag 1797-OrderEventExecID to reconcile with EBS CPT.

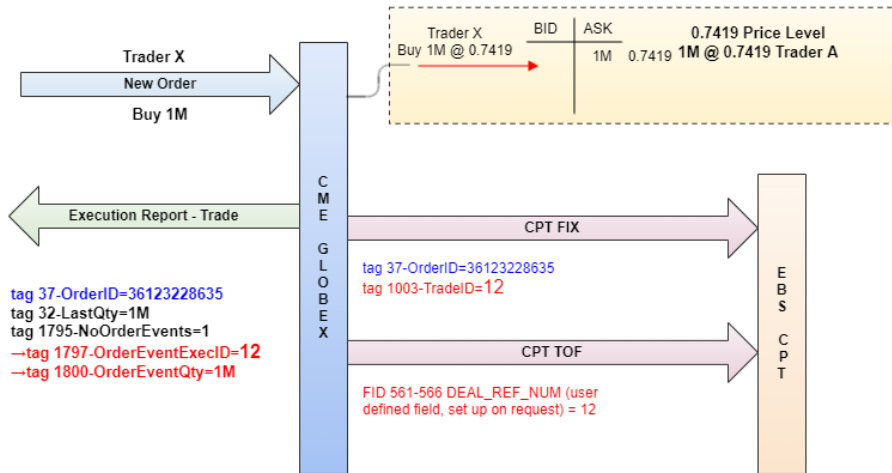
- On EBS CPT FIX, tag 1003-TradeID is required for uniquely identifying a trade back to iLink 3.
- On EBS CPT TOF, FID 561-566 User Defined Field DEAL_REF_NUM is required for uniquely identifying a trade back to iLink 3.

i For EBS customers, the unique Deal ID in Ai is common to maker and taker and other parties to the trade. This field is the value that the back office/Prime Broker will recognize as the trade ID

The following examples show how to reconcile the Execution Report - Trade tag 1795-NoOrderEvents repeating groups with the corresponding CPT FIX trade capture reports.

- [Example 1 - Incoming Aggressor Order Matches with Single Resting Order](#)
- [Example 2 - Incoming Aggressor Order Matches with Multiple Resting Orders at Single Price Level](#)
- [Example 3 - Incoming Aggressor Order Matches with Multiple Resting Orders at Two Different Price Levels - Limit Price Only](#)
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Example 1 - Incoming Aggressor Order Matches with Single Resting Order



Aggressor Buy Order for 1M @ 0.7419 from Trader X

Resting Sell Orders for 1M @ 0.7419 from Trader A

When the incoming aggressor order matches with a single resting order:

Trader X receives: Qty traded=1M

- One iLink 3 Execution Report – Trade message
- One CPT FIX message

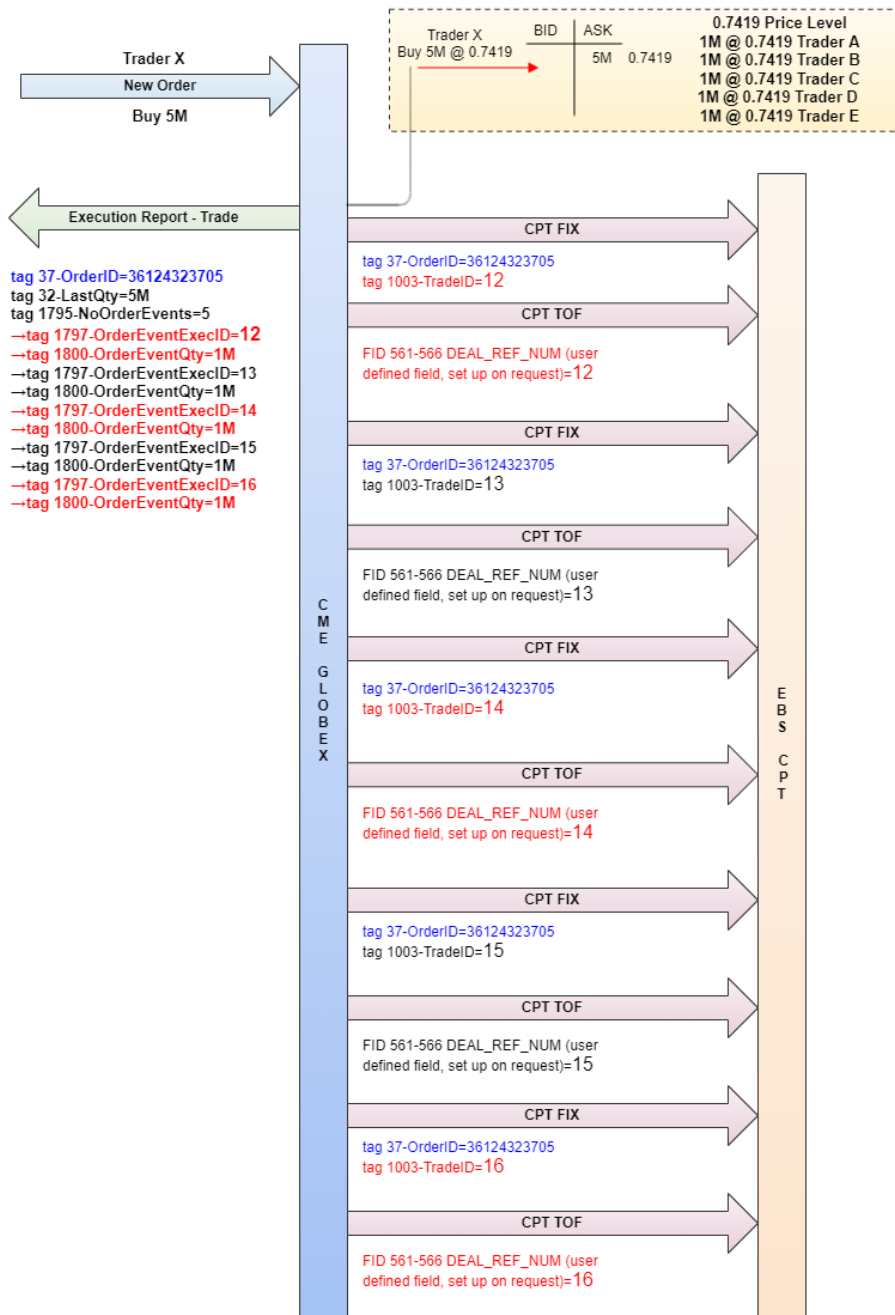
iLink 3 Execution Report - Trade (Tag 37-OrderID)	iLink 3 Execution Report - Trade (Tag 1797-OrderEventExecID)	CPT FIX 1		Price Filled	QTY Filled
		Tag 37-OrderID	Tag 1003-TradeID		
36123228635	12	36123228635	12	0.7419	1M

Trader A receives: Qty traded=1M

- One iLink 3 Execution Report – Trade message
- One CPT FIX message

iLink 3 Execution Report - Trade (Tag 37-OrderID)	iLink 3 Execution Report - Trade (Tag 1797-OrderEventExecID)	CPT FIX 1		Price Filled	QTY Filled
		Tag 37-OrderID	Tag 1003-TradeID		
36123228636	12	36123228636	12	0.7419	1M

Example 2 - Incoming Aggressor Order Matches with Multiple Resting Orders at Single Price Level



Aggressor Buy Order for 5M @ 0.7419 from Trader X

Resting Sell Orders:

- Order_1 1m@0.7419 from Trader A
- Order_2 1m@0.7419 from Trader B
- Order_3 1m@0.7419 from Trader C
- Order_4 1m@0.7419 from Trader D
- Order_5 1m@0.7419 from Trader E

When the incoming aggressor order matches with multiple resting orders at a single price level (Limit price only):

Trader X receives: Qty traded=5M

- One iLink 3 Execution Report – Trade message
- Multiple CPT FIX messages with different Trade IDs
 - Each of these trades will have a unique value of tag 1003-TradeIDNumber which corresponds to iLink 3 tag1797-OrderEventExecutionID.

iLink 3 Execution Report - Trade (Tag 37-OrderID)	iLink 3 Execution Report - Trade (Tag 1797-OrderEventExecutionID)	CPT FIX 1		CPT FIX 2		CPT FIX 3		CPT FIX 4		CPT FIX 5		Price Filled	QTY Filled
		tag 37-OrderID	tag 1003-TradeID	tag 37-OrderID	tag 1003-TradeID	tag 37-OrderID	tag 1003-TradeID	tag 37-OrderID	tag 1003-TradeID	tag 37-OrderID	tag 1003-TradeID		
36124323705	12	36124323705	12									0.7419	1M
	13			36124323705	13							0.7419	1M
	14					36124323705	14					0.7419	1M
	15							36124323705	15			0.7419	1M
	16									36124323705	16	0.7419	1M

Trader A receives: Qty traded=1M

- One iLink 3 Execution Report – Trade message
- One CPT FIX message

iLink 3 Execution Report - Trade (tag 37-OrderID)	iLink 3 Execution Report - Trade (Tag 1797-OrderEventExecutionID)	CPT FIX		Price Filled	QTY Filled
		tag 37-OrderID	(tag 1003-TradeID)		
36124323706	12	36124323706	12	0.7419	1M

Trader B receives: Qty traded=1M

- One iLink 3 Execution Report – Trade message
- One CPT FIX message

iLink 3 Execution Report - Trade (tag 37-OrderID)	iLink 3 Execution Report - Trade (Tag 1797-OrderEventExecutionID)	CPT FIX		Price Filled	QTY Filled
		tag 37-OrderID	(tag 1003-TradeID)		
36124323707	13	36124323707	13	0.7419	1M

Trader C receives: Qty traded=1M

- One iLink 3 Execution Report – Trade message
- One CPT FIX message

iLink 3 Execution Report - Trade (tag 37-OrderID)	iLink 3 Execution Report - Trade (Tag 1797-OrderEventExecutionID)	CPT FIX		Price Filled	QTY Filled
		tag 37-OrderID	(tag 1003-TradeID)		
36124323708	14	36124323708	14	0.7419	1M

Trader D receives: Qty traded=1M

- One iLink 3 Execution Report – Trade message
- One CPT message

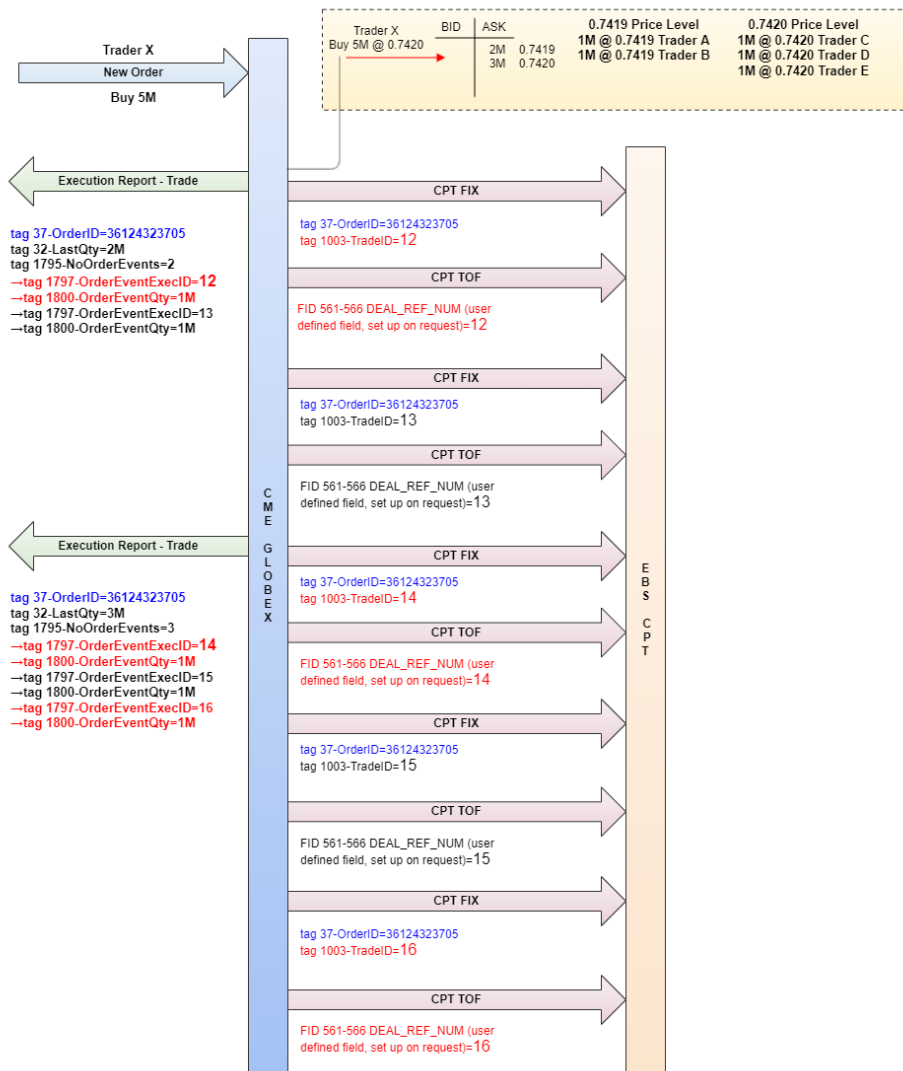
iLink 3 Execution Report - Trade (tag 37-OrderID)	iLink 3 Execution Report - Trade (Tag 1797-OrderEventExecutionID)	CPT FIX		Price Filled	QTY Filled
		tag 37-OrderID	(tag 1003-TradeID)		
36124323709	15	36124323709	15	0.7419	1M

Trader E receives: Qty traded=1M

- One iLink 3 Execution Report – Trade message
- One CPT FIX message

iLink 3 Execution Report - Trade (tag 37-OrderID)	iLink 3 Execution Report - Trade (Tag 1797- OrderEventExecID)	CPT FIX		Price Filled	QTY Filled
		tag 37-OrderID	(tag 1003-TradeID)		
36124323710	16	36124323710	16	0.7419	1M

Example 3 - Incoming Aggressor Order Matches with Multiple Resting Orders at Two Different Price Levels - Limit Price Only



Aggressor Buy Order for 5m @ 0.7420 from Trader X

Resting Sell Orders:

Order_1 1m@0.7419 from Trader A

Order_2 1m@0.7419 from Trader B

Order_3 1m@0.7420 from Trader C

Order_4 1m@0.7420 from Trader D

Order_5 1m@0.7420 from Trader E

When the incoming aggressor order matches with multiple resting orders at two different price levels (Limit price only):

Trader X receives:

- Two iLink 3 Execution Report – Trade messages
 - Fill Report 0.7419 @ 2M
 - Fill Report 0.7420 @ 3M
- Multiple CPT FIX messages with different Trade IDs
 - Each of these trades will have a unique value of tag 1003-TradeIDNumber which corresponds to iLink 3 tag1797-OrderEventExecutionID.

iLink 3 Execution Report - Trade (tag 37-OrderID)	iLink 3 Execution Report - Trade 1 (Tag 1797-OrderEventExecID)	iLink 3 Execution Report - Trade 2 (Tag 1797-OrderEventExecID)	CPT FIX 1		CPT FIX 2		CPT FIX 3		CPT FIX 4		CPT FIX 5	
			tag 37-OrderID	tag 1003-TradeID	tag 37-OrderID	tag 1003-TradeID	tag 37-OrderID	tag 1003-TradeID	tag 37-OrderID	tag 1003-TradeID	tag 37-OrderID	tag 1003-TradeID
36124323705	12		36124323705	12								
	13				36124323705	13						
		14					36124323705	14				
		15							36124323705	15		
		16									36124323705	16

Trader A receives: Qty traded=1M

- One iLink 3 Execution Report – Trade message
- One CPT FIX message

iLink 3 Execution Report - Trade (tag 37-OrderID)	iLink 3 Execution Report - Trade (Tag 1797-OrderEventExecID)	CPT FIX		Price Filled	QTY Filled
		tag 37-OrderID	(tag 1003-TradeID)		
36124323706	12	36124323706	12	0.7419	1M

Trader B receives: Qty traded=1M

- One iLink 3 Execution Report – Trade message
- One CPT FIX message

iLink 3 Execution Report - Trade (tag 37-OrderID)	iLink 3 Execution Report - Trade (Tag 1797-OrderEventExecID)	CPT FIX		Price Filled	QTY Filled
		tag 37-OrderID	(tag 1003-TradeID)		
36124323707	13	36124323707	13	0.7419	1M

Trader C receives: Qty traded=1M

- One iLink 3 Execution Report – Trade message
- One CPT FIX message

iLink 3 Execution Report - Trade (tag 37-OrderID)	iLink 3 Execution Report - Trade (Tag 1797-OrderEventExecID)	CPT FIX		Price Filled	QTY Filled
		tag 37-OrderID	(tag 1003-TradeID)		
36124323708	14	36124323708	14	0.7420	1M

Trader D receives: Qty traded=1M

- One iLink 3 Execution Report – Trade message
- One CPT FIX message

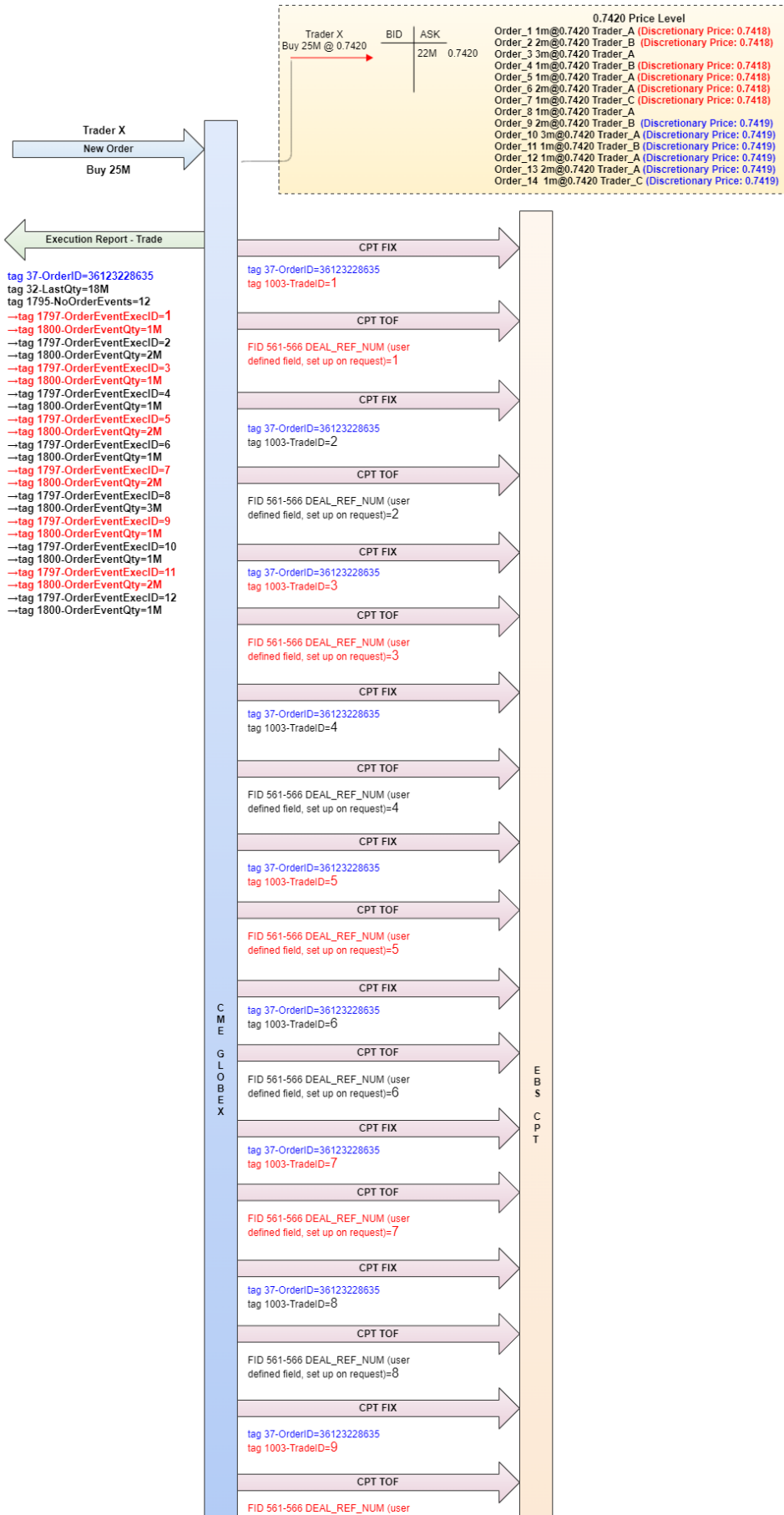
iLink 3 Execution Report - Trade (tag 37-OrderID)	iLink 3 Execution Report - Trade (Tag 1797- OrderEventExecID)	CPT FIX		Price Filled	QTY Filled
		tag 37-OrderID	(tag 1003-TradeID)		
36124323709	15	36124323709	15	0.7420	1M

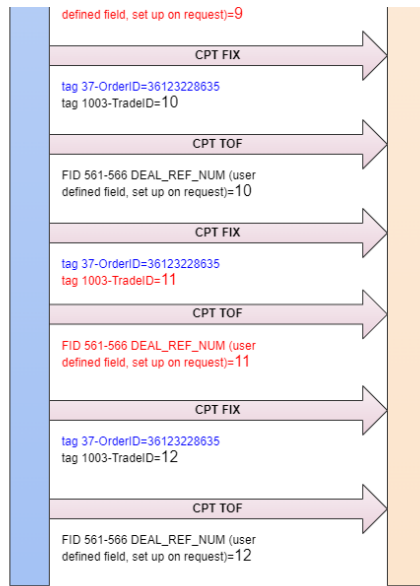
Trader E receives: Qty traded=1M

- One iLink 3 Execution Report – Trade message
- One CPT FIX message

iLink 3 Execution Report - Trade (tag 37-OrderID)	iLink 3 Execution Report - Trade (Tag 1797- OrderEventExecID)	CPT FIX		Price Filled	QTY Filled
		tag 37-OrderID	(tag 1003-TradeID)		
36124323710	16	36124323710	16	0.7420	1M

Example 4 - Incoming Aggressor Order Matches with Multiple Resting Orders at Single Price Level with Some Resting Orders Having Price Discretion





Aggressor Buy Order for 25m @ 0.7419 from Trader X

Resting Sell Orders @0.7420:

- Order_1 1m@0.7420 Trader_A Discretionary Price to 0.7418
- Order_2 2m@0.7420 Trader_B Discretionary Price to 0.7418
- Order_3 3m@0.7420 Trader_A
- Order_4 1m@0.7420 Trader_B Discretionary Price to 0.7418
- Order_5 1m@0.7420 Trader_A Discretionary Price to 0.7418
- Order_6 2m@0.7420 Trader_A Discretionary Price to 0.7418
- Order_7 1m@0.7420 Trader_C Discretionary Price to 0.7418
- Order_8 1m@0.7420 Trader_A
- Order_9 2m@0.7420 Trader_B Discretionary Price to 0.7419
- Order_10 3m@0.7420 Trader_A Discretionary Price to 0.7419
- Order_11 1m@0.7420 Trader_B Discretionary Price to 0.7419
- Order_12 1m@0.7420 Trader_A Discretionary Price to 0.7419
- Order_13 2m@0.7420 Trader_A Discretionary Price to 0.7419
- Order_14 1m@0.7420 Trader_C Discretionary Price to 0.7419

When the incoming aggressor order matches with multiple resting orders at a single price level and some of the resting orders have Price Discretion:

Trader X receives: Qty traded=18M@0.7419 with remaining Qty 7M@0.7419

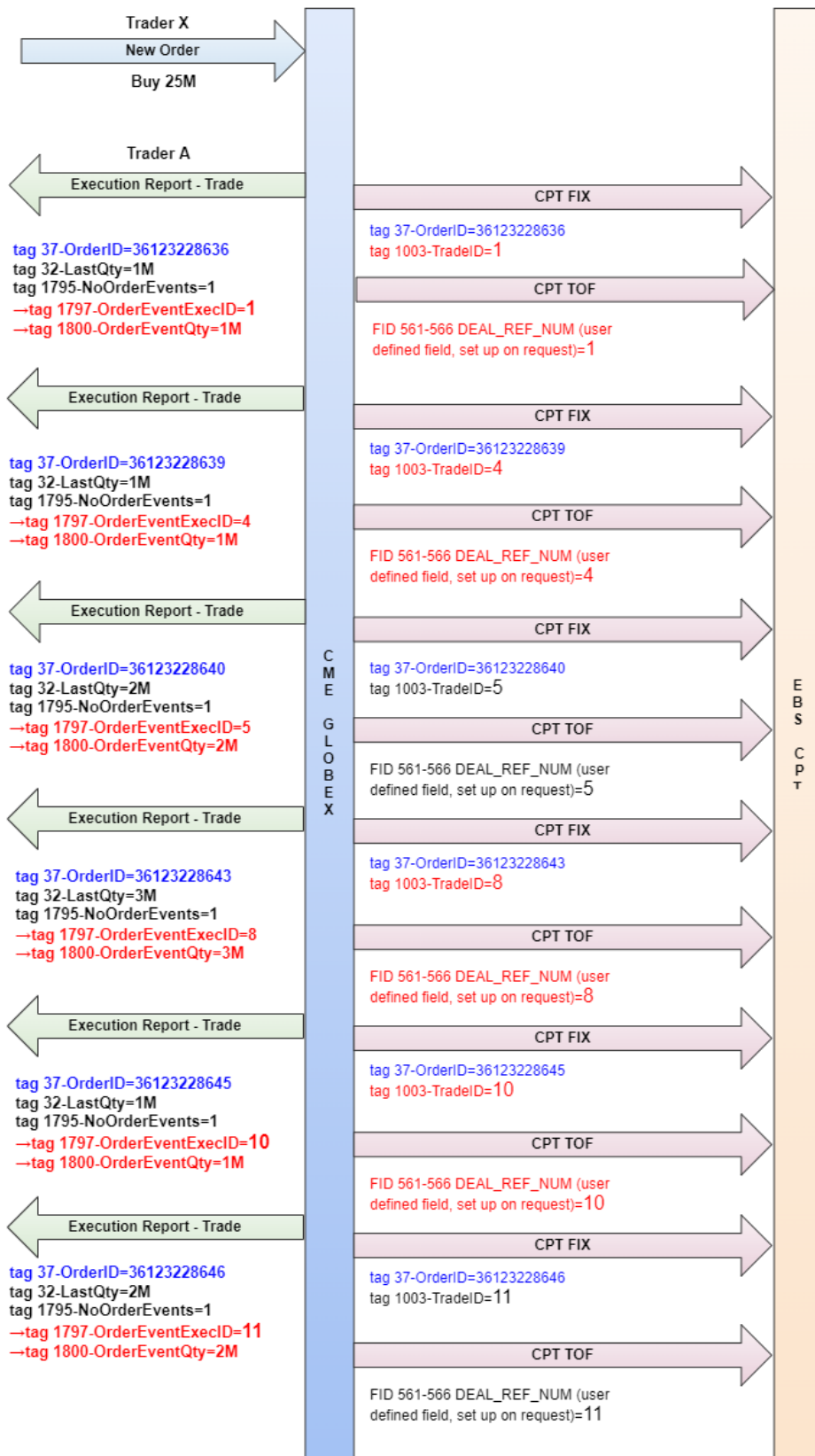
- One iLink 3 Execution Report – Trade message with tag 1795-NoOrderEvents =12
- Multiple CPT FIX messages with different Trade IDs
 - Each of these trades will have a unique value of tag 1003-TradeIDNumber which corresponds to iLink 3 tag1797-OrderEventExecutionID

iLink 3 Execution Report - Trade (tag 37-OrderID)	iLink 3 Execution Report - Trade (Tag 1797-OrderEventExecID)	CPT FIX 1		CPT FIX 2		CPT FIX 3		CPT FIX 4		CPT FIX 5		CPT FIX 6	
		tag 37-OrderID	tag 1003-TradeID	tag 37-OrderID	tag 1003-TradeID	tag 37-OrderID	tag 1003-TradeID	tag 37-OrderID	tag 1003-TradeID	tag 37-OrderID	tag 1003-TradeID	tag 37-OrderID	tag 1003-TradeID

36123228635	1	36123228635	1										
	2			36123228635	2								
	3					36123228635	3						
	4							36123228635	4				
	5									36123228635	5		
	6											36123228635	6
	7												
	8												
	9												
	10												
	11												
	12												

Trader A receives: Qty traded=10M

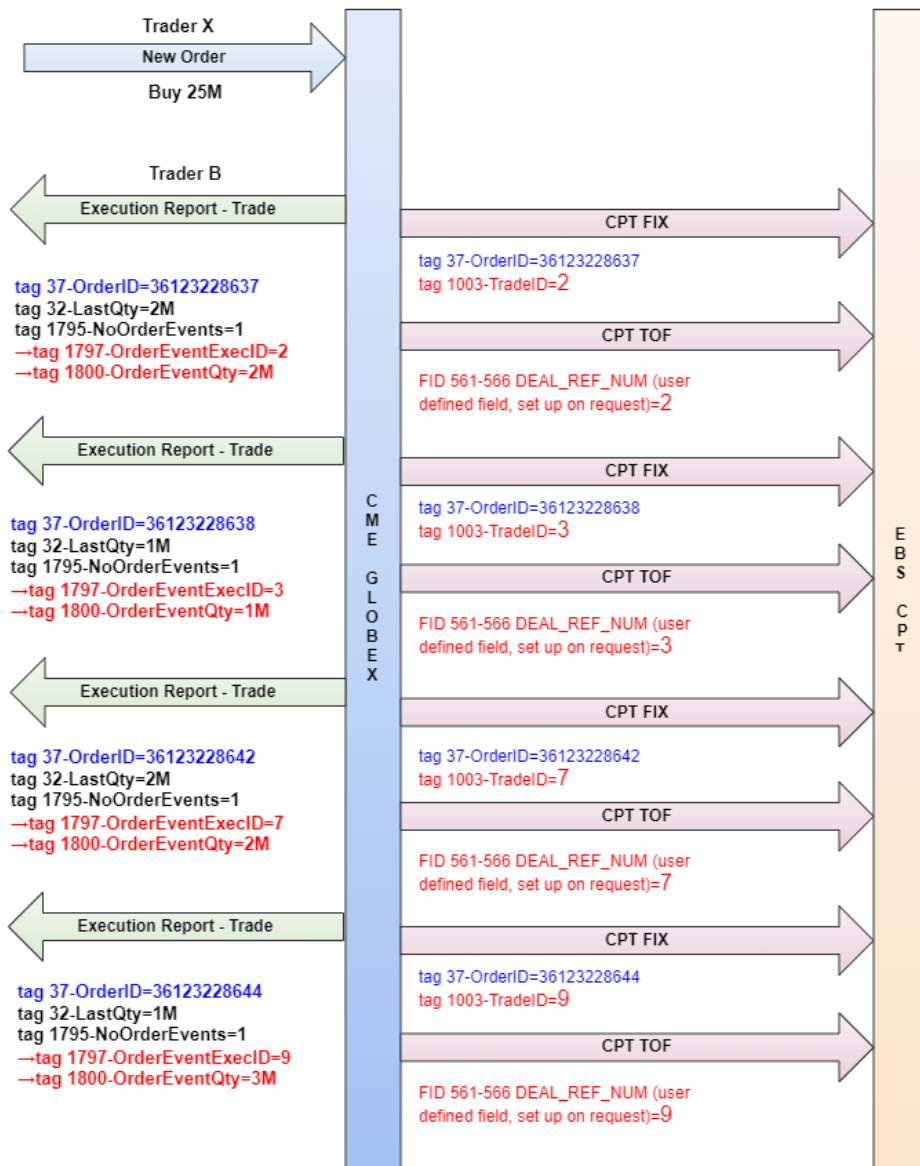
- Six iLink 3 Execution Report – Trade messages
- Six CPT messages



iLink 3 Execution Report - Trade (tag 37- OrderID)	iLink 3 Execution Report - Trade 1 (Tag 1797- OrderEventExecID)	CPT FIX 1		QTY Filled
		tag 37-OrderID	tag 1003- TradeID	
36123228636	1	36123228636	1	1M
36123228639	4	36123228639	4	1M
36123228640	5	36123228640	5	2M
36123228643	8	36123228643	8	3M
36123228645	10	36123228645	10	1M
36123228646	11	36123228646	11	2M

Trader B receives: Qty traded=6M

- Four iLink 3 Execution Report – Trade messages
- Four CPT FIX messages



iLink 3 Execution Report - Trade (tag 37- OrderID)	iLink 3 Execution Report - Trade 1 (Tag 1797- OrderEventExecID)	CPT FIX 1		QTY Filled
		tag 37-OrderID	tag 1003- TradeID	
36123228637	2	36123228637	2	2M

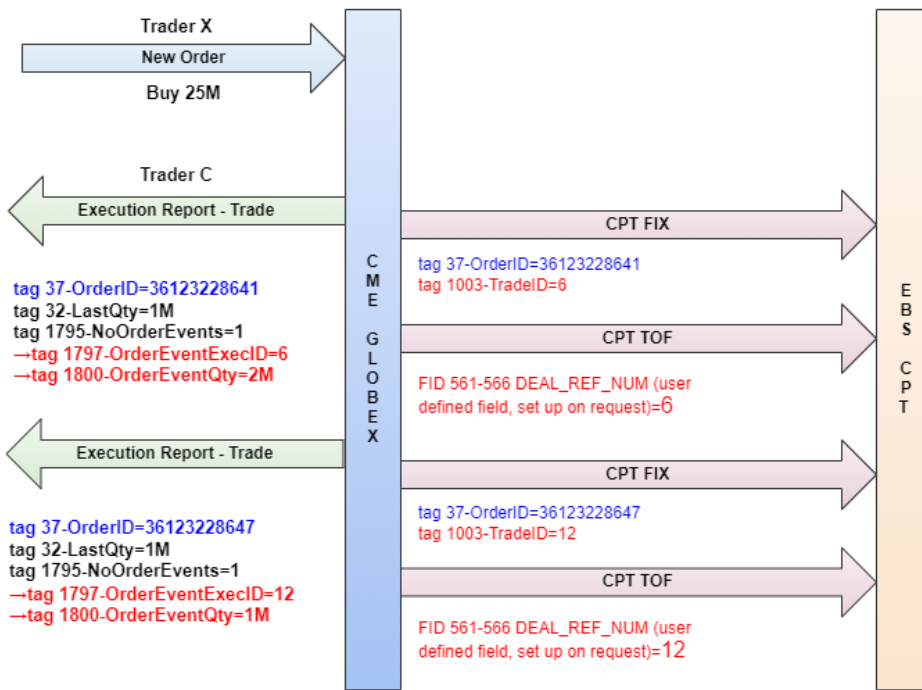
iLink 3 Execution Report - Trade (tag 37- OrderID)	iLink 3 Execution Report - Trade 1 (Tag 1797- OrderEventExecID)	CPT FIX 1		QTY Filled
		tag 37-OrderID	tag 1003- TradeID	
36123228638	3	36123228638	3	1M

iLink 3 Execution Report - Trade (tag 37- OrderID)	iLink 3 Execution Report - Trade 1	CPT FIX 1		QTY Filled

	(Tag 1797- OrderEventExecID)	tag 37-OrderID	tag 1003- TradeID	
36123228642	7	36123228642	7	2M
iLink 3 Execution Report - Trade (tag 37- OrderID)	iLink 3 Execution Report - Trade 1 (Tag 1797- OrderEventExecID)	CPT FIX 1		QTY Filled
		tag 37-OrderID	tag 1003- TradeID	
36123228644	9	36123228644	9	1M

Trader C receives: Qty traded=2M

- Two iLink 3 Execution Report – Trade messages
- Two CPT FIX messages



iLink 3 Execution Report - Trade (tag 37- OrderID)	iLink 3 Execution Report - Trade 1 (Tag 1797- OrderEventExecID)	CPT FIX 1		QTY Filled
		tag 37-OrderID	tag 1003- TradeID	
36123228641	6	36123228641	6	1M
iLink 3 Execution Report - Trade (tag 37- OrderID)	iLink 3 Execution Report - Trade 1 (Tag 1797- OrderEventExecID)	CPT FIX 1		QTY Filled
		tag 37-OrderID	tag 1003- TradeID	
36123228647	12	36123228647	12	1M