FIA Post-Trade Standards Working Group

Related Trades and Positions Gap Analysis

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Revision 0.40

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Document History

Revision	Date	Author	Revision Comments
0.10	May 24, 2011	Ryan Pierce, CME Group	Initial draft.
0.20	October 14, 2011	Ryan Pierce, CME Group	Updated following FIA PTWG Chicago onsite meeting: Divided Related Transactions into Related Trades and Related Positions. Related Trades will be added to Position Maintenance Report and Position Report. Trades may specify a Market for uniqueness. ID Type renamed to ID Source and made optional. These are changed to reflect the Trade/Position split.
0.30	November 4, 2011	Ryan Pierce, CME Group	Updated following November 2 New York GTC onsite meeting: Renamed document to "Related Trades and Positions". Changed RelatedTradeMarket to RelatedTradeMarketID and abbreviation to MktID. Renamed components RelatedTrades to RelatedTradeGrp, and RelatedPositions to RelatedPositionGrp. Added enumerations for FirmTradeID and SecondaryFirmTradeID. Removed Reserved1000+ from new ID source fields. Textual, style, and typo corrections.
0.40	December 16, 2011	Hanno Klein, Deutsche Börse Group	Updated following December 15, 2011, GTC meeting after completion of the public review period: Added RelatedTradeQty to RelatedTradeGrp Added value to RelatedTradeIDSource to convey references to trades not communicated via FIX messages.
ASBUILT	February 4, 2012	Jim N	Assigned official numbers for components and fields
	February 13, 2012	L. Taikitsadaporn	Clean up edits
	March 22, 2012	R. Shriver	Clearn up edits of component reference.
	March 24, 2012	L. Taikitsadaporn	Additional narrative text clean up.

1 Introduction

FIX generally represents transactions as independent entities which, in some cases, have well-defined relationships to other transactions. E.g. an Execution-Report carries the ClOrdID(11) of a New-Order – Single, linking the two transactions.

However, transactions can relate to other transactions in ways that have no current representation in the FIX semantic model. This gap analysis seeks to create a standard general mechanism for:

- A trade to identify one or more related trades

- A position to identify one or more related trades

- A trade to identify one or more related positions

This allows for FIX users to express various types of relationships between transactions, supporting diverse business flows, without necessitating changes to the FIX Protocol semantics.

2 Business Workflow

Business cases that could be supported by this gap analysis include:

- Netting for forwards. Under certain circumstances, multiple forwards transactions can be consolidated into a netted transaction. This could be accomplished by cancelling or terminating the original trades, and creating a new trade. In this case, the original trades being terminated could reference the new trades as related trades, and/or the new trade could reference the original trades being terminated as related trades.

- Trades produce positions, which can be communicated via the Position-Maintenance-Report (35=AM) message. Related positions would allow a Trade-Capture-Report (35=AE) message to reference a resulting Position-Maintenance-Report (35=AM) message.

- Options exercise and assignment create or eliminate positions, and can produce trade records. Related positions would allow a Trade-Capture-Report (35=AE) message to reference resulting positions, and related trades would allow a Position-Maintenance-Report (35=AM) message to identify the resulting trades.

As related trades and related positions are general concepts, other use cases could take advantage of these features. The list above is not inclusive.

Related trades or positions should not be used in lieu of explicit FIX fields that denote specific semantic relationships, but rather should be used when no such fields exist. E.g. OrigTradeID(1126) appears in a Trade Capture-Report message. This field is the proper way to relate a trade to the trade it replaces. Use of related trades in lieu of OrigTradeID(1126) is not permitted.

3 Issues and Discussion Points

3.1 Applicability

The concept of related trades and positions is, by design, very general, and could conceivably be used within many FIX messages. This gap analysis originally proposed its addition only to the Trade-Capture-Report and Trade Capture-Report-Ack messages. Do other immediate needs for it exist?

Resolution: Additionally, related trades will be added to Position-Maintenance-Report and Position-Repor messagest. However, related positions will appear only on Trade-Capture-Report and Trade-Capture-Report-Ack messages.

3.2 Related Transaction ID Types

The types of identifiers initially proposed by this gap analysis are limited to current business requirements, but could, of course, be extended. Do other immediate needs exist?

Resolution: Split this into two components, one for Ttrades and one for Ppositions. Allocation identifiers are eliminated.

3.3 Describing Semantic Relationships

The concept of related trades and positions, by design, does not convey any explicit semantic meaning. In other words, one may use this concept to say, "The report side of this Trade-Capture-Report is related to TradeID ABC123." It does not make any explicit reference to the semantic nature of the relationship. Rather, the relationship must be inferred.

An (optional) field could be added to the proposed repeating component to convey semantic meaning. However, doing so would require FPL to define a list of semantic meanings. Is this necessary?

Resolution: No. Semantic meaning of related trades and positions is implicit and will be defined bilaterally. Rules of engagement between counterparties will document the meaning of the implicit semantic relationships.

3.4 Applicability to Position Maintenance Request

This gap analysis adds RelatedTradeGrp component to the Position-Report and Position-Maintenance-Report messages. The GTC considered adding this component to the Position-Maintenance-Request message as well. Given that no existing business need was identified, the GTC opted not to do so unless a business need for this function emerges.

3.5 Related Trade Quantity

The RelatedTradeGrp component is intended to unqiuely reference related trades and not to provide arbitrary attributes of the trade. However, there is a business requirement from Eurex for so-called OTC Volatility trades to identify parts of the quantity of a related (options) trade as being the quantity to offset the current (futures) trade. Therefore, the GTC decided to add a RelatedTradeQuantity (1860) field to the repeating group. The related trade quantity must not exceed the quantity of the referenced trade.

3.6 Source of Related Trade

The RelatedTradeGrp component contains an optional field RelatedTradeIDSource(1857) to identify the FIX field offrom the TradeCaptureReport message that was used as s source for the content of RelatedTradeID(1856). This does not cover the use case where a trade needs to be referenced that was not conveyed through FIX. The GTC decided to add another valid value to RelatedTradeIDSource(1857) to explicitly convey a non-FIX identifier.

4 Proposed Message Flow

This Gap Analysis makes no changes to existing Trade Capture or Positions flows.

5 FIX message tables

5.1 FIX Message PositionReport

To be completed at the time of the proposal	
Message Name	PositionReport

Message Abbreviated Name (for FIXML)		PosRpt
Category		PositionMaintenance
Message Synopsis	*No change*	
Message Elaboration	*No change*	
To be finalized by FPL Technical Office		
(MsgType(tag 35) Enumeration		
Repository Component ID		

- Add ~~component~~ RelatedTradeGrp component immediately prior to the Text(58) field.

5.2 FIX Message PositionMaintenanceReport

To be completed at the time of the proposal		
Message Name		PositionMaintenanceReport
Message Abbreviated Name (for FIXML)		PosMntRpt
Category		PositionMaintenance
Message Synopsis	*No change*	
Message Elaboration	*No change*	
To be finalized by FPL Technical Office		
(MsgType(tag 35) Enumeration		
Repository Component ID		

- Add ~~component~~ RelatedTradeGrp component immediately prior to the Text(58) field.

6 FIX component blocks

6.1 Component RelatedTradeGrp

To be completed at the time of the proposal	
Component Name	RelatedTradeGrp
Component Abbreviated Name (for FIXML)	ReltdTrd
Component Type	_X_ Block Repeating ___ Block
Category	Common
Component Synopsis	~~Indicates related trades~~This component is used to identify trades that are related to each other for a business purpose, such as netting of forwards. This component should not be used in lieu of explicit FIX fields that denote specific semantic relationships, but rather should be used when no such fields exist.
Component Elaboration	
To be finalized by FPL Technical Office	
Repository Component ID	2209

Component FIXML Abbreviation: <ReltdTrd>						
Tag	Field Name		Req'd	ICR	Action	*Mappings and Usage Comments*	*FIX Spec Comments*
1855	NoRelatedTrades		***		NEW		
→	1856	RelatedTradeID	N		NEW		~~Identifier of the related trade. Conditionally required when~~Required if NoRelatedTrades(1855) > 0.
→	1857	RelatedTradeIDSource	N		NEW		~~Indicated the source of the identifier that RelatedTradeID represents. Optional.~~
→	1858	RelatedTradeDate	N		NEW		Optionally used to help identify the trade when RelatedTradeID(1856) is not unique across multiple days.
→	1859	RelatedTradeMarketID	N		NEW		Optionally used to help identify the trade when RelatedTradeID(1856) is not unique across multiple markets.

➔	1860	RelatedTradeQuantity	N		NEW		~~Optionally used to convey how much of the quantity of the related trade is subject to this relationship.~~
					</ReltdTrd>		

6.2 Component RelatedPositionGrp

To be completed at the time of the proposal	
Component Name	RelatedPositionGrp
Component Abbreviated Name (for FIXML)	ReltdPos
Component Type	_X_ Block Repeating ___ Block
Category	Common
Component Synopsis	~~Indicates related positions~~<u>This component is used to identify positions that are related to each other or to other trades</u>. This should not be used in lieu of explicit FIX fields that denote specific semantic relationships, but rather should be used when no such fields exist.
Component Elaboration	
To be finalized by FPL Technical Office	
Repository Component ID	2210

Component FIXML Abbreviation: *<ReltdPos>*						
Tag	Field Name		Req'd	ICR	Action	*Mappings and Usage Comments*	Comments
1861	NoRelatedPositions~~Grp~~		***		NEW		
➔	1862	RelatedPositionID	N		NEW		~~Identifier of the related position. Conditionally r~~Required ~~when~~ if NoRelatedPositions(1861) > 0.
➔	1863	RelatedPositionIDSource	N		NEW		~~Indicated the source of the identifier that RelatedPositionID represents. Optional.~~
➔	1864	RelatedPositionDate	N		NEW		~~Optionally used to help identify the trade when RelatedPositionID is not unique across multiple days.~~
					</ReltdPos>		

6.3 Component TrdCapRptSideGrp

To be completed at the time of the proposal	
Component Name	TrdCapRptSideGrp
Component Abbreviated Name (for FIXML)	RptSide
Component Type	_X_ Block Repeating ___ Block
Category	TradeCapture
Component Synopsis	
Component Elaboration	
To be finalized by FPL Technical Office	
Repository Component ID	20613

- Add component RelatedTradeGrp component to the end of this component.

- Add component RelatedPositionGrp component to the end of this component.

6.4 Component TrdCapRptAckSideGrp

To be completed at the time of the proposal	
Component Name	TrdCapRptAckSideGrp
Component Abbreviated Name (for FIXML)	RptSide
Component Type	_X_ Block Repeating ___ Block
Category	TradeCapture
Component Synopsis	
Component Elaboration	
To be finalized by FPL Technical Office	
Repository Component ID	2094

- Add component RelatedTradeGrp component to the end of this component.

- Add component RelatedPositionGrp component to the end of this component.

Appendix A - Data Dictionary

Tag	Field Name	Action	Data type	Description	FIXML Abbreviation	Add to / Deprecate from Message type or Component block
1855	NoRelatedTrades	NEW	NumInGroup	Number of related trades.		RelatedTradeGrp
1856	RelatedTradeID	NEW	String	Identifier of a related trade.	@ID	RelatedTradeGrp
1857	RelatedTradeIDSource	NEW	int	Describes the source of the identifier that RelatedTradeID (1856) represents. Valid values: 0 = Non-FIX source 1 = Trade ID 2 = Secondary ~~T~~trade ID 3 = Trade ~~R~~report ID 4 = Firm ~~T~~trade ID 5 = Secondary ~~F~~firm ~~T~~trade ID	@Src	RelatedTradeGrp
1858	RelatedTradeDate	NEW	LocalMktDt	Date of a related trade.	@Dt	RelatedTradeGrp
1859	RelatedTradeMarketID	NEW	Exchange	Market of execution of related trade.	@MktID	RelatedTradeGrp
1860	RelatedTradeQuantity	NEW	Qty	~~Related q~~Quantity of the related trade which can be less than or equal to the actual quantity of the related trade~~.~~, ~~e.g.~~For example, when one trade offsets another across asset classes.	@Qty	RelatedTradeGrp
1861	NoRelatedPositions	NEW	NumInGroup	Number of related positions.		RelatedPositionGrp
~~TBD~~1862	RelatedPositionID	NEW	String	Identifier of a related position.	@ID	RelatedPositionGrp

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| 1863 | RelatedPositionIDSource | NEW | int | Describes the source of the identifier that RelatedPositionID(1862) represents. Valid values: 1 = Position Mmaintenance Rreport ID | @Src | RelatedPositionGrp |
| 1864 | RelatedPositionDate | NEW | LocalMkt Dt | Used to help identify the position when RelatedPositionID(1862) is not unique across multiple days. This date is generally the creation date of the identifier. | @Dt | RelatedPositionGrp |

Appendix B - Glossary Entries

Term	Definition	Field where used

Appendix C – Abbreviations

Term	Proposed Abbreviation	Proposed Messages, Components, Fields where used

Appendix D - Usage Examples