



SOLID FX INTERNAL DROP COPY SPECS

For the Solid FX currency trading platform

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Revisions

Version	Date	Remarks
1.00	06 March 2014	Initial version, based on version 1.05 of the Drop Copy FIX Specs

Introduction

This document provides a detailed overview of the limited functionality, internal Drop Copy implementation exposed by the SFX Core component of the Solid FX (SFX) trading platform. This interface is intended for other internal SFX components who either wish to receive historical and/or real time trade information regarding the trades executed on the platform, or wish to send trades to the SFX Core component that needs to update the client's positions with the trades.

It is assumed that the reader of this document is familiar with the FIX protocol. Detailed information on FIX can be found at <http://www.fixprotocol.org>.

Session level specification

The following session level messages are supported:

- Heartbeat [tag 35, MsgType = 0]
- Test Request [tag 35, MsgType = 1]
- Resend Request [tag 35, MsgType = 2]
- Reject [tag 35, MsgType = 3]
- Sequence Reset [tag 35, MsgType = 4]
- Logon [tag 35, MsgType = A]
- Logout [tag 35, MsgType = 5]

Standard header

Every message needs to start with the following standard header:

Tag	Field name	Required	Comments
8	BeginString	Y	Message start – “FIX.4.4”.
9	BodyLength	Y	Message length in bytes.
35	MsgType	Y	Message type.
49	SenderCompID	Y	ID provided by Solid FX .
56	TargetCompID	Y	ID of the Solid FX Drop/Copy server.
34	MsgSeqNum	Y	Message sequence number.
43	PossDupFlag	N	Indicates if this message has possibly been retransmitted.
52	SendingTime	Y	The GMT timestamp of the message.

Trailer

Every message needs to end with the following standard trailer:

Tag	Field name	Required	Comments
10	Checksum	Y	Integer byte count of the entire message length excluding the CheckSum itself.

Heartbeat

Tag	Field name	Required	Comments
	<i>Standard header</i>	Y	[tag 35, MsgType = 0]
112	TestReqID	N	Required if this is a response to a Test Request message.
	<i>Standard trailer</i>		

Test request

Tag	Field name	Required	Comments
	<i>Standard header</i>	Y	[tag 35, MsgType = 1]
112	TestReqID	Y	This ID will be reported back in the resulting Heartbeat.
	<i>Standard trailer</i>		

Resend request

Tag	Field name	Required	Comments
	<i>Standard header</i>	Y	[tag 35, MsgType = 2]
7	BeginSeqNo	Y	First sequence number to be resent.
16	EndSeqNo	Y	Last sequence number to be resent. Should be set to 0 when all messages following BeginSeqNo need to be resent.
	<i>Standard trailer</i>	Y	

Reject

Tag	Field name	Required	Comments
	<i>Standard header</i>	Y	[tag 35, MsgType = 3]
371	RefTagID	N	The tag number of the field being referenced.
372	RefMsgType	N	The MsgType of the message being referenced.
373	SessionRejectReason	N	Reason why the message has been rejected.
45	RefSeqNum	Y	MsgSeqNum of the rejected message.
58	Text	N	Explaining text.
	<i>Standard trailer</i>	Y	

Logon

Tag	Field name	Required	Comments
	<i>Standard header</i>	Y	[tag 35, MsgType = A]
98	EncryptMethod	Y	Encryption – "0"
108	HeartBtInt	Y	Heartbeat interval in seconds.
141	ResetSeqNumFlag	N	Indicates if both incoming and outgoing sequence numbers should be reset to 1.
554	Password	Y	Assigned password.
	<i>Standard trailer</i>	Y	

Logout

Tag	Field name	Required	Comments
	<i>Standard header</i>	Y	[tag 35, MsgType = 5]
58	Text	N	Logout message.
	<i>Standard trailer</i>	Y	

Application level specification

The following application level messages are supported:

- Business Message Reject [tag 35, MsgType = j, (SFX) Core to component]
- Trade Capture Report Request [tag 35, MsgType = AD, component to Core]
- Trade Capture Report Request Ack [tag 35, MsgType = AQ, Core to component]
- Trade Capture Report [tag 35, MsgType = AE, both directions]

Business Message Reject

When a message is valid from a syntactical perspective, but cannot be processed by the SFX Core component, a Business Message Reject will be issued.

Tag	Field name	Required	Comments
	<i>Standard header</i>	Y	[tag 35, MsgType = j]
372	RefMsgType	Y	MsgType of the rejected message
380	BusinessRejectReason	Y	Reason for rejection.
58	Text	N	Explaining text.
	<i>Standard trailer</i>	Y	

Trade Capture Report Request

Used to retrieve historical trades and/or subscribe to new trade events for all users the client is authorized to see trade information for.

Tag	Field name	Required	Comments
	<i>Standard header</i>	Y	[tag 35, MsgType = AD]
568	TradeRequestID	Y	Unique ID for this message.
569	TradeRequestType	Y	Valid values: 0 = All trades 1 = Trades matching criteria
263	SubscriptionRequestType	Y	Valid values: 1 = Snapshot and Updates (historical plus subscribe to new trades)
55	Symbol	Y	Valid values: Symbol name (e.g. "EUR/USD") for which trades are requested, or "*" = Trades for all symbols will be sent
580	NoDates	Y	Number of date fields provided. Only used to determine which historical trades to retrieve. Valid values: 0 = all trades 1 = all trades from this date 2 = all trades from first date up until the second date
→	75 - TradeDate	Y	Date for historical trades to fetch in YYYYMMDD format. Example: NoDates = 1 [20110610] will result in a selection of trades starting from June 10 th 17:00 New York time and for NZD related trades 07:00 Auckland time. NoDates = 2 [20110610, 20110612] will result in a selection of trades starting from June 10 th 17:00 New York time and for NZD related trades 07:00 Auckland time up until June 12 th 17:00 New York / 07:00 Auckland time.
	<i>Standard trailer</i>	Y	

Trade Capture Report Request Acknowledgement

Used to respond to Trade Capture Report Requests and/or to indicate the last of the Trade Capture Reports has been sent.

Tag	Field name	Required	Comments
	<i>Standard header</i>	Y	[tag 35, MsgType = AQ]
568	TradeRequestID	Y	Unique ID for this message, assigned by the client
569	TradeRequestType	Y	Value will be repeated from original request
749	TradeRequestResult	Y	Valid values: 0 = Successful 1 = Invalid or unknown instrument 8 = TradeRequestType not supported 99 = Other
750	TradeRequestStatus	Y	Valid values: 0 = Accepted 1 = Completed. Will be after the last historical trade has been sent 2 = Rejected
	<i>Standard trailer</i>	Y	

Trade Capture Report – SFX Core to client component

The Trade Capture Report can be generated either by the SFX Core for the client component to pick up and process or by the client component for the SFX Core to process into its positions list for the purpose of Credit Management.

The following table lists the fields for the Trade Capture Report that is generated by the SFX Core and sent to the client components.

Tag	Field name	Required	Comments
	<i>Standard header</i>	Y	[tag 35, MsgType = AE]
568	TradeRequestID	Y	ID from the original request
571	TradeReportID	Y	ID for this trade report; uniqueness is not guaranteed
17	ExecID	Y	Original ExecID of the trade sent
570	PreviouslyReported	Y	Will always be "N"
55	Symbol	Y	Symbol ID of the trade
31	LastPx	Y	Price of the trade
32	LastQty	Y	Quantity of the trade
60	TransactTime	Y	Time of execution
64	SettlDate	Y	Settlement date in YYYYMMDD format
75	TradeDate	Y	Trade date (Session date) in YYYYMMDD format. NB: the trade date or session date will take into account the roll-over of the trading day at the appropriate time for NZD and non-NZD symbols.
552	NoSides	Y	Number of Side-groups in this message, will always be 1.
→	54 Side	Y	Side of the trade
→	37 OrderID	Y	Original OrderID of the trade
→	1 Account	N	Account field of the original order of the trade.
8008	UserID	Y	UserID of the originator of the trade.
8102	CounterExecutionID	Y	The ExecID of the trade that countered this trade.
8103	CounterPartyUserID	Y	The UserID of the Central Counter Party user.
8104	Aggressor	Y	Will be "Y" when the original order of the trade was the aggressor, "N" when the original order was already active in the order book when the order of the counter trade was entered in the system.
	<i>Standard trailer</i>	Y	

Trade Capture Report – Client component to SFX Core

The following table lists the fields for the Trade Capture Report that is generated by the SFX Core and sent to the client components.

Tag	Field name	Required	Comments
	<i>Standard header</i>	Y	[tag 35, MsgType = AE]
568	TradeRequestID	Y	ID from the original request
571	TradeReportID	Y	ID for this trade report; uniqueness is not guaranteed
17	ExecID	Y	Original ExecID of the trade sent
570	PreviouslyReported	Y	Will always be "N"
55	Symbol	Y	Symbol (for instance EUR/USD) of the trade
31	LastPx	Y	Price of the trade
32	LastQty	Y	Quantity of the trade
60	TransactTime	Y	Time of execution
64	SettlDate	Y	Settlement date in YYYYMMDD format
75	TradeDate	Y	Trade date (Session date) in YYYYMMDD format. NB: the trade date or session date will take into account the roll-over of the trading day at the appropriate time for NZD and non-NZD symbols.
552	NoSides	Y	Number of Side-groups in this message, will always be 1.
→	54 Side	Y	Side of the trade
→	37 OrderID	Y	Original OrderID of the trade
453	NoParties	Y	Number of Party-groups in this message, will always be 1.
→	448 PartyID	Y	Company name of the user that has executed this trade.
→	452 PartyRole	Y	Will always be 1 (EXECUTING_FIRM)
6674	Base Reference Price	N	Will be filled if the base currency of the Symbol of this trade is other than "USD". It will contain the conversion rate that may be used to convert the position change of the base currency to USD.
6675	Terms Reference Price	N	Will be filled if the terms currency of the Symbol of this trade is other than "USD". It will contain the conversion rate that may be used to convert the position change of the terms currency to USD.
8008	UserID	Y	UserID of the originator of the trade.
8102	CounterExecutionID	Y	The ExecID of the trade that countered this trade.
8103	CounterPartyUserID	Y	The UserID of the Central Counter Party user.
8104	Aggressor	Y	Will be "Y" when the original order of the trade was the aggressor, "N" when the original order

was already active in the order book when the order of the counter trade was entered in the system.

Standard trailer Y
