

Trading FIX API Interface

Version 2.0 - 5/2006

FIX 4.2 Execution-Side Interface

This documentation discusses the FIX 4.2 execution-side interface. See <http://www.fixprotocol.org> for more details.

1 BeginString

In all messages sent by Genesis, the value for the BeginString field is set to FIX.4.2. The BeginString field values in messages received by Genesis are completely ignored.

1.1 PossDupFlag

For message New Single Order and Cancel Replace Request, if PossDupFlag is "Y", the order will be rejected.

2 Logon

Name	ID	Req'd	Description
SenderSubID	50	F	User ID in Genesis Trading system
SendingTime	52	F	
RawDataLength	95	F	Length of RawData
RawData	96	F	Password
EncryptMethod	98	F	(Always unencrypted)
HeartBtInt	108	F	

2.1 RawData

This tag is the password to log into Genesis trading system. It is used with User ID (SenderSubID tag 50).

2.2 SenderSubID

SenderSubID tag 50 is User ID in Genesis Trading system. RawData tag 96 is password in Genesis Trading system. FIX clients must send these two tags to login Genesis Trading system.

3 New Order Single Message (D)

This message is used to send a new order to the market.

Name	ID	Req'd	Description
Account	1	F	
ClOrdID	11	F	
HandlInst	21	F	
OrderQty	38	F	
OrdType	40	F	See order types below
Price	44		See order types below
Rule80A	47	F	
Side	54	F	
Symbol	55	F	
TimeInForce	59	F	DAY, IOC
TransactTime	60	F	yyyymmdd-hh:mm:ss GMT
StopPx	99		See order types below
ExDestination	100	F	See order types below
RoutingInst	9303	O	'B' or 'T'
PfdMktMkr	9307	O	

3.1 Order-Type Market

Market orders have no price fields.

Name	ID	Req'd	Description
OrdType	40	F	'1' = market

3.2 OrderType Limit

Limit price is required.

Name	ID	Req'd	Description
OrdType	40	F	'2' = limit
Price	44	F	Limit price

3.3 OrderType Stop

Stop price is required.

Name	ID	Req'd	Description
OrdType	40	F	'3' = stop
Price	44	F	stop price

3.4 OrderType Stop Limit

Stop price and stop limit price are required.

Name	ID	Req'd	Description
OrdType	40	F	'4' = stop
Price	44	F	stop price
StopPx	99	F	limit price

3.5 TimeInForce

At this time the Genesis only accepts DAY, and IOC orders.

3.6 ExDestination

This tag is routing method in Genesis Trading system. It is one of "ISLD", "BRUT", "SOES", etc. If it is "NYSE" or "AMEX", our FIX server will automatically choose one of methods to send the order.

Routing method in Genesis Trading system keeps adding or removing. Please call our trading support to get a full list.

3.7 TransactTime

Transaction time is compared with our FIX server's local time. If the difference is greater than a specified number, the order will be rejected with message "stale order".

3.8 RoutingInst

RoutingInst is used to specify how to route the order. 'B' specifies to stay in the book. 'T' specifies to route out the order to the market.

4 Order Cancel Request Message (F)

The Cancel-Reject message is used to cancel a pending order.

Name	ID	Req'd	Description
Account	1	F	
ClOrdID	11	F	
OrderID	37	O	Order ID from FIX server
OrigClOrdID	41	F	The order to be canceled
Side	54	F	
Symbol	55	F	
TransactTime	60	F	

4.1 OrderID

OrderID is optional. But if there is an OrderID in the message, the process may be faster.

5 Order Cancel Replace Request Message (G)

The Cancel Reject Request message is used to cancel the original order and replace it with a new one.

5.1 Order Cancel Replace Request

Name	ID	Req'd	Description
Account	1	O	
ClOrdID	11	F	The cancel request
HandlInst	21	F	
OrderQty	38	O	
OrdType	40	F	
OrigClOrdID	41	F	The order to be canceled
Price	44	O	
Rule80A	47	O	
Side	54	F	
Symbol	55	F	
TimeInForce	59	O	DAY, IOC
TransactTime	60	F	
StopPx	99	O	
ExDestination	100	O	See order types below
RoutingInst	9303	O	'B' or 'T'
PfdMktMkr	9307	O	

Order Cancel Replace Request can be viewed as the integration of New Order Single and the Order Cancel Request. For more information on Order Cancel/Replace Request Message, please refer to "Financial Information Exchange Protocol (FIX) Version 4.2", March 1, 2000

6 Execution Message (8)

Genesis sends execution messages whenever one order is rejected, or acknowledged, or canceled or filled.

6.1 Order Rejected

If Genesis trading system finds one order is rejected by itself or market, an order rejected message is generated.

Name	ID	Req'd	Description
Account	1	F	
AvgPx	6	O	0
ClOrdID	11	FO	
CumQty	14	O	0
ExecID	17	F	
ExecTransType	20	F	'0' = new
OrderID	37	F	
OrderQty	38	F	
OrdStatus	39	F	'8' = rejected
Side	54	F	
Symbol	55	F	
Text	58	F	
TransactTime	60	F	yyyymmdd-hh:min: ss GMT
OrdRej Reason	103	F	
ExecType	150	F	'8' = rejected

6.2 Order New (Ack)

When one order is accepted by market, an order new (ack) message is generated.

Name	ID	Req'd	Description
Account	1	F	
ClOrdID	11	O	
CumQty	14	O	0
ExecID	17	F	
ExecTransType	20	F	'0' = new
OrderID	37	F	
OrderQty	38	F	
OrdStatus	39	F	'0' = new, 'E'=replace
Side	54	F	
Symbol	55	F	
TransactTime	60	F	yyyymmdd-hh:min:ss GMT
ExecType	150	F	'0' = new
LeavesQty	151	F	

6.3 Order Canceled

When one order is canceled by clients or market or Genesis trading system, one order canceled message is generated.

Name	ID	Req'd	Description
Account	1	F	
AvgPx	6	F	0
ClOrdID	11	O	
CumQty	14	F	0
ExecID	17	F	
ExecTransType	20	F	'0' = new
LastPx	31	F	0
LastQty	32	F	0
OrderID	37	F	
OrderQty	38	F	
OrdStatus	39	F	'4' = canceled
OrigClOrdID	41	O	
Side	54	F	
Symbol	55	F	
TransactTime	60	F	yyyymmdd-hh:min:ss GMT
ExecType	150	F	'4' = canceled

6.4 Fill Message

When one order is executed (filled) partially or fully, one order trade message is generated.

Name	ID	Req'd	Description
Account	1	F	
AvgPx	6	F	
ClOrdID	11	O	
CumQty	14	F	
ExecID	17	F	
ExecTransType	20	F	'0' = new
LastPx	31	F	
LastQty	32	F	
OrderID	37	F	
OrderQty	38	F	
OrdStatus	39	F	'1'= partially filled '2'= filled
OrdType	40	F	See order types below
OrigClOrdID	41	O	
Price	44	F	See order types below
Side	54	F	
Symbol	55	F	
Text	58		
TransactTime	60		yyyymmdd-hh:mm:ss GMT
ExecType	150	F	'1'= partially filled '2'= filled '5'= replace filled
LeavesQty	151	O	
TradeLiquidityIndicator	9730	O	

7 Cancel Reject Message (9)

The Cancel Reject message is used to reject a cancel.

Name	ID	Req'd	Description
Account	1	F	
ClOrdID	11	O	
OrderID	37	F	
OrigClOrdID	41	O	
Text	58	F	
TransactTime	60	F	yyyymmdd-hh:min: ss GMT
CxlRejReason	102	O	