

# Cy Group FIX API V2\_0\_42

Version 2.0.4 – 2/15/08

**History:**

1/29/07 Updated: Use the field ExecBrocke(76) for 'routing Strategy'.  
6/14/07 Updated: Add ClOrdID for all ERs  
7/16/07 Updated: Add tag 6, 14 and 151 for all ERs.  
2/15/2008 Updated: Add tag 57 for Credit Suisse

# 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" and possible duplicate function is off on the server side, the order will be rejected, if possible duplicate function is on, the order will be ignored if already processed, otherwise will be processed.

## 2 Logon

Name	ID	Req'd	Description
SenderSubID	50	O	User ID in Genesis Trading system
SendingTime	52	F	
RawDataLength	95	O	Length of RawData
RawData	96	O	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.

### 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 below
Price	44		See below
Rule80A	47	O	Default 'A'
Side	54	F	'1'=Buy '2'=Sell '5'=Short Sell
Symbol	55	F	
TimeInForce	59	F	DAY, IOC
TransactTime	60	F	yyyymmdd-hh:mm:ss GMT
ExecBroker	76	O	Four character string for 'routing Strategy'. Must not empty. "INET", "DOTN", ... (**1)
StopPx	99		See below
ExDestination	100	F	See below
RoutingInst	9303	O	'B' or 'T'
PfdMktMkr	9307	O	
TargetSubID	57	O	Credit Suisse Cross Type.  For Low Latency valid value: "NEUTRAL" "AGGRESSIVE" "PASSIVE"  Normal value: "NEUTCROSS" "AGGRCROSS" "PASCROSS"

(\*\*1) The field ExecBroker's value can be one of the followings:  
INET, DOTN, DOTA, DOTM, DOTO, DOTP, DOTI, DOTD,  
SPDY, STGY, SCAN, ALIQ, or string of four spaces

INET: No routing.

DOTN: Sweep all facilities of NASDAQ (INET, Brut, NASDAQ Market Center? and go directly to the NYSE floor. The order will sweep the books at the more conservative of the NYSE quote or the limit price specified on the order. If the order is not completely filled, it is sent to the NYSE floor at the limit price specified on the order. If you are a buyer, the more conservative price is the lower of the limit and NYSE price. If you are a seller, the more conservative price is the higher of the limit and NYSE price. In order to send your order via NYSE Direct+, please follow the instructions in the Implementation Table below.

DOTA: Sweep the INET book and the Street. If the order is not completely filled, the remainder is

sent to the NYSE floor. The order IOC's the INET book at the price it would send to another destination before sending it to that destination. Finally, it is sent to the NYSE floor at the limit price specified on the order. Routing destinations are INET, NASDAQ, Brut and ARCA. In order to send your order via NYSE Direct+, please follow the instructions in the Implementation Table below.

**DOTM:** Sweep the INET book and the Street. After routing to accessible market centers, the order will be posted to the INET book. If the order becomes marketable on another accessible market center while on the INET book, the order will route to the other market center. If the order routes to the NYSE or Amex it will remain on the NYSE or Amex until being executed or canceled. In order to send your order via NYSE Direct+, please follow the instructions in the Implementation Table below.

**DOTO:** The order will be sent via DOT to participate in the Opening Cross. Any unexecuted shares will be posted to the INET book. If the order becomes marketable on another accessible market center while on the INET book, the order will route to the other market center. If the order routes to the NYSE or Amex after being on the INET book, it will remain on the NYSE or Amex until being executed or canceled. In order to send your order via NYSE Direct+, please follow the instructions in the Implementation Table below.

**DOTP:** Sweep the INET book and the Street. After routing to accessible market centers, the order will reside on the INET book for a pre-determined period of time, currently set at three seconds, after which the order will be routed via DOT. In order to send your order via NYSE Direct+, please follow the instructions in the Implementation Table below.

**DOTI:** Similar to DOTN except the order will only route to the INET book before sending to DOT. In order to send your order via NYSE Direct+, please follow the instructions in the Implementation Table below.

**DOTD:** The order will be routed directly to the NYSE or Amex without sweeping the INET book. In order to send your order via NYSE Direct+, please follow the instructions in the Implementation Table below.

**SPDY:** The order will sweep the INET book at the price it would send to another destination before sending it to that destination. If the order is not completely filled, it will post on the INET book. If the order is for a security eligible for a de minimis exception to the trade-through rule, INET will ignore Amex prices when adjusting the order during a locked or crossed market.

**STGY:** The order will sweep the INET book at the price it would send to another destination before sending it to that destination. Finally, it will be posted on INET. This strategy will not send the order to DOT. All orders, except IOC orders, will post to the INET book if not filled in the market.

**SCAN:** The strategy is similar to STGY except once it posts on the book it will not route out again if the market moves.

**ALIQ :** Add liquidity Only.

### 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
StopPx	99	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 Limit price
StopPx	99	F	Stop 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	O	
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	
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	Must match original order
Symbol	55	F	Must match original order
TimeInForce	59	O	DAY, IOC
TransactTime	60	F	
ExecBroker	76	O	Four character string for 'routing Strategy'. Must not empty. "INET", "DOTN", ... (**1)
StopPx	99	O	
ExDestination	100	O	
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	F	0
ClOrdID	11	F	
CumQty	14	F	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
LeavesQty	151	F	

### 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	
AvgPx	6	F	0
ClOrdID	11	F	
CumQty	14	F	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
CIOrdID	11	F	CIOrdID of the cancel or replace request. -or- CIOrdID of the order subject to unsolicited cancel
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
OrigCIOrdID	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	F	
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
LeavesQty	151	F	
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	O	
ClOrdID	11	F	ClOrdID of the cancel or replace request.
OrderID	37	F	
OrigClOrdID	41	F	
Text	58	F	
TransactTime	60	F	yyyymmdd-hh:min: ss GMT
CxlRejReason	102	O	
CxlRejResponseTo	434	F	