FIX Implementation Manual

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Revision 2019-001
2019/03/06

Disclaimer

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Contents

3

Summary of Changes

Revision 2019-001 contains the following changes/additions:

- Fix Adaptive Priority on page 36
- Formatting cleanup

Revision 2018-003 contains the following changes/additions:

- Addition of new Order Capacity paragraph on page 18.
- Updated note related to order types on page 21.
- Updated definition of tag 204.

Revision 2018-002 contains the following changes/additions:

- Removal of reference to CTCI (computer-to-computer-interface), as CTCI, as a protocol is being retired by FINRA.
- Added support for Accumulate/Distribute and Adaptive ALGOs via FIX
- Update to Pre-Trade Allocation order type:
  - Removal of messaging showing the allocation mechanics out of the master
  - Adding support for Allocation Profile
- Added support for What-If order type
- Added support for Pair Trades
- Added new FIX tags related to MiFID Regulations
- Update of IB datacenter

Revision 2018-001 contains the following changes/additions:

- Tag 168 has been removed from VWAP orders (p 26) as IBKR will no longer support partial-day guaranteed VWAP orders effective 3/5/2018.

Revision 2017-001 contains the following changes/additions:

- Addition of Equinix Cross Connect solution in Telecommunication Link Types section
- Update to new order single, modify and cancel messages, requiring FIX tag 1 be present
- Creation of section FX Conversion Definition on page
- Added support for distinct tags for IBKR STK AGLO orders
- Added section to Seq # Management outlining IBKR supported options

Revision 2014-001 contains the following changes:
- Removed Limit order only requirement for spreads Tag 40.

Revision 2013-001 contains the following changes and additions:

- Tag 6116 (IgnoreRegularTradingHours) removed from Appendix C as it is no longer supported.
- Updated Pegged to Stock (Delta) Orders section with reference to compulsory tag 6271

(CheapToReroute). Added tag 6271 to Appendix C.
- Net priced fixed income orders described under Fixed Income Definition section. Tag 6882 (UseNetPrice) added to the list of custom tags in Appendix C.

Introduction

This manual describes the way Interactive Brokers LLC ("IBKR") implements industry standard Financial Information Exchange (FIX™) Protocol[†] as specific for IBKR clients and vendors who connect to IBKR using "FIX". IBKR currently supports FIX versions 4.0 through 4.4, with a strong preference towards version 4.2. IBKR uses some tags specific to FIX version 4.3 and 4.4 (as well as custom IBKR tags) when certifying clients for FIX version 4.2. This manual documents messages supported by IBKR and their particular implementation. For a complete guide to the FIX standard please refer to the official FIX home page at the following URL: http://www.fixprotocol.org

This document assumes the default definition of the FIX standard unless otherwise noted. Only message types and fields (tags and values) which are supported by IBKR FIX engine are included in this manual. Not supported fields are not guaranteed to be included in FIX messages sent by IBKR. If an unsupported field is received by IBKR, it is not validated for processing purposes. FIX messages with unknown tags are not rejected as long as they include all necessary supported tags. Messages of types that are not supported are rejected.

[†] "FIX Protocol", Financial Information Exchange", "FIXML" and "FIX" are trademarks or service marks of FIX Protocol Limited. The marks "FIX Protocol", "FIXML" and "FIX" are registered trademarks in the European Community.

Session Management

Supported Telecommunication Link Types

IBKR requires that FIX customers/vendors use one of the following telecommunication link types:

- Equinix Cross-Connect. Interactive Brokers has a point of presence in Equinix datacenters in the US (NY5 and CH4), in Zurich (ZH4), and in Hong Kong (HK3). With management approval, IBKR allows clients who are hosted in these datacenters to cross-connect with IBKR. Clients who cross-connect with IBKR are responsible for the datacenter costs associated with the connectivity.

- Extranet Provider. In select IBKR data centers, we support extranet providers Radianz and/or TNS. The client must be connected to chosen extranet provider in order to use this connectivity option. Extranet providers guarantee a secure dedicated connection between client and IBKR data centers.

- Dedicated Leased Line. Clients can opt to order a dedicated network connection into an IBKR data center via one of the telecommunications providers supported by IBKR. Examples of telco providers who terminate leased lines into IBKR are: AT&T, Verizon, and Lightpath. Please contact IBKR Client Integration Group for the list of available telecommunications providers in various data centers.

- Virtual Private Network (VPN). This network connection type allows for connection over public Internet using secure tunnel. VPN allows for a private peer-to-peer telecommunication connection without a need for a dedicated leased line or an extranet provider.

- IBKR Gateway Client. Connection through public Internet using IBKR Gateway Client application (or IBKR Trader Workstation). The client must run the IBKR provided client application locally and use it as a gateway to IBKR system.

In addition, IBKR supports direct unprotected FIX connectivity over public Internet for Quality Assurance ("QA") and User Acceptance Testing ("UAT") only. IBKR provides dedicated IP and port in its QA/UAT environment for customer testing and certification.

Authentication

For cross connects, extranet connections, dedicated line connections and VPN clients the authentication is accomplished by cross checking the source IP of the client, SenderCompID (FIX tag 49) and dedicated TCP port assigned to the client. No additional authentication is required due to the private nature of telecommunication link.

For IBKR Gateway Client Connections the client must enter a valid username and password provided by IBKR. The IBKR Gateway Client then establishes a secure SSL tunnel to IBKR system. The user's FIX engine then connects to the Gateway Client using valid SenderCompID.

By default all customers must use "IBKR" as their FIX TargetCompID and their IBKR username as FIX SenderCompID. IBKR Client Integration Group must be contacted if alternative Sender and Target CompID values are preferred.

Sequence Number Management

A FIX session consists of a series of messages with a continuous set of sequence numbers. Resetting the inbound and outbound sequence numbers back to 1 establishes a new FIX session. A client can establish a new FIX session by setting tag 141 (ResetSeqNumFlag) to "Y" in the login message. IBKR does not initiate sequence number resets.

Inbound and outbound sequence numbers should be tracked independently. This is to identify gaps in message delivery. After authentication, the client and host must synchronize their message sequence numbers before any new messages can be sent. In the event that the received sequence number is higher than the expected sequence number, the client should respond with a Resend Request specifying the range of missing sequence numbers in tag 7 (BeginSeqNo) and tag 16 (EndSeqNo) tags. IBKR supports the value of 0 in tag 16 which would indicate the highest available sequence number.

If the sequence number received is less than the expected sequence number and tag 43 (PosDupFlag) is not set to "Y", it will not be possible to establish a FIX session until the sent sequence number is equal to or greater than the one expected. A reject message will be sent with the expected sequence number sent in the text tag.

By default, IBKR does not reset the sequence numbers each night. However it is possible to configure your account to do so. Sequence numbers would then be reset to 1 (inbound and outbound) each night during system restart. Weekly sequence number resets are also supported.

Below are the 3 supported methods of seq # management:

1. Client agrees to send 141=Y once per day (typically on the initial logon each day), and not thereafter…as sending 141=Y intra-day can lead to lost messages. This is our default method.
2. Client and IBKR agree to a hard nightly reset of seq #. In the US and Europe, IBKR will reset seq #s at ~12:30am ET, and in HK this will occur at ~5pm ET. Initial logons each day for both clients and IBKR will be at 1/1, without the use of tag 141.
3. Client and IBKR agree to a weekly nightly reset of seq #. IBKR reset seq #'s at ~12:30am ET on Saturday. Both the client and IBKR will begin the following trading week with seq # 1/1, without the use of tag 141.

All clients must specify the seq # reset method to be used prior to beginning FIX integration efforts.

Orders Eligible Only During Regular Trading Hours

IBKR will configures all FIX sessions such that orders routed to IBKR via FIX are eligible for execution only during Regular Trading Hours (RTH) as determined by the exchange. If a client wishes to either (a) have orders eligible for execution outside of RTH or (b) control orders on their own (using FIX tag 6205, see *__Appendix B__*) IBKR will remove this RTH-only default setting by request.

Session Protocol

Message Format and Field Delimiter

IBKR currently supports the standard "Tag=Value" FIX syntax. The general format of a FIX message applies. Messages consist of a series of "Tag=Value" fields separated by a field delimiter. The delimiter is ASCII 1 (SOH) symbol. Examples in this manual will represent that delimiter with a space. All messages begin with a standard header and are terminated with a standard trailer.

Message Recovery

Message gaps may occur during login or in the middle of a FIX session that require message recovery. When this occurs, a Resend Request message can be sent requesting a range of missing messages. The re-sender will then respond with a Sequence Reset message that has tag 123 (GapFillFlag) set to "Y" and tag 43 (PossDupFlag) set to "Y". Tag 36 (NewSeqNo) will be set to the sequence number of the message to be redelivered next. Following this, the missing Application level messages will be resent. Most Administrative messages will not be resent. The administrative messages that will not be resent are: Logon, Logout, ResendRequest, Heartbeat, TestRequest and SeqReset-Reset and SeqReset-GapFill. This process of Sequence Reset / message delivery will continue until all of the relevant messages within the specified range have been delivered.

Standard Message Header

Every administrative or application message must begin with a standard header. IBKR Supports the fields listed below.

Tag #	Field Name	Req'd	Comments
8	BeginString	Y	FIX.4.1, FIX.4.2 or FIX.4.3 are supported in this tag *If FIX 4.3 is specified, see Appendix A
9	Body Length	Y	Message length, in bytes, forward to checksum field

35	MsgType	Y	IBKR Supports the following values:
			  0 = Heartbeat
			  1 = Test Request
			  2 = Resend Request
			  3 = Reject
			  4 = Sequence Reset
			  5 = Logout
			  8 = Execution Report
			  9 = Order Cancel Reject
			  A = Logon
			  B = News/Bulletin Message
			  D = Order Single
			  F = Order Cancel Request
			  G = Order Cancel/Replace Request
			  H = Order Status Request
			  J = Allocation
			  P = Allocation Ack
			  AB = New Order Multileg (FIX 4.3)
			  AC = Multileg Cancel Replace Request

Tag #	Field Name	Req'd	Comments
49	SenderCompID	Y	By default, this is the IBKR username. Alternatively, a different value may be agreed upon with IBKR FIX Integration Group
50	SenderSubID	N	Optional
56	TargetCompID	Y	Default is "IBKR", if required the value can be determined by the client, please notify Client Integration Group.
57	TargetSubID	N	Per Standard
34	MsgSeqNum	Y	Per Standard. Please note that IBKR currently supports sequence numbers up to 999999. Sequence numbers must be reset once they reach that value. IBKR recommends daily or weekly sequence number resets to avoid this issue.
43	PossDupFlag	N	Per Standard
97	PossResend	N	Per Standard
52	SendingTime	Y	Per Standard
122	OrigSendingTime	N	Per Standard

Standard Message Trailer

Each message, administrative or application, is terminated by a standard trailer. IBKR only requires tag 10 (CheckSum).

Tag #	Field Name	Req'd	Comments
10	CheckSum	Y	3 byte simple checksum. Always represented as 3 ASCII characters.

Message Compression

Interactive Brokers (IBKR) supports FIX message compression. The compression is enabled per client request and following a certification in a test environment. FIX customers are encouraged to use compression when large amounts of FIX traffic are expected and/or when communication network bandwidth is limited. Standard zlib/deflate compression method is used to compress messages as they are exchanged between IBKR and FIX customers. One or more messages, including their standard FIX header and trailer, are grouped into a single compression blocks. A special header is added to the compression block before it is transmitted through socket. Uncompressed data is treated as if it came straight from the socket.

The following compression message format is used:

Tag #	Field Name	Req'd	Comments
8	Begin String	Y	FIXCOMP protocol name is used to distinguish compressed message from regular FIX messages.
9	Body Length	Y	Length of the message
n/a	Binary Data	Y	Zlib/deflate binary data is included here without any tag value, but after a standard SOH delimiter. One or more zlib compressed FIX messages can be transmitted in a single compressed message.

Standard FIX before compression:

```
8=FIX.4.2<SOH>9=0204<SOH>35=D<SOH>34=000007<SOH>43=N<SOH>...<SOH>10=115
```

Compressed FIX where `<Binary Data>`   represents zlib/deflate compressed contents of

11

standard FIX message before compression. Note absence of tag 10 at the end of the message.

```
8=FIXCOMP<SOH>9=122<SOH><Binary Data>
```

Administrative Messages

Administrative messages are used for session management and address the utility needs of the protocol. IBKR uses the following Administrative messages:
- Logon
- Heartbeat
- Test Request
- Resend Request
- Reject (Session Level)
- Sequence Reset (Gap Fill)
- Logout

This section describes the administrative messages that IBKR uses and provides the layout for each message.

Logon

The logon message is used to establish a FIX connection with IBKR. It therefore must be the first message sent.

Tag #	Field	Req'd	Comments
	Standard Header	Y	MsgType = A
98	EncryptMethod	Y	Valid Value = 0 (none, encryption is currently not supported)
108	HeartBtInt	Y	A heartbeat interval of 30 seconds is suggested. The initiator may set it to any value, but the acceptor (IBKR) may override this interval when necessary. That means that the initiator has to be prepared to receive and respond to Test Request and Heartbeat messages in any case.
141	ResetSeqNumFlag	N	This field is optionally required when a new session is to be opened, depending on seq # management configuration
	Standard Trailer	Y	

Heartbeat

If either end of the connection has not sent any data in the amount of time specified in the heartbeat interval, a heartbeat message will be sent. If a heartbeat message is not received within the specified heartbeat interval, the connection should be considered lost. IBKR recommends a heartbeat interval of 30 seconds.

Tag #	Field	Req'd	Comments
	Standard Header	Y	MsgType = 0
112	TestReqID	N	Required when the heartbeat is the result of a Test Request message.
	Standard Trailer	Y	

12

Test Request

The test request message forces a heartbeat from the opposing application. If either end of the connection has not received any data within the specified heartbeat interval a test request message will be sent. IBKR suggests the use of a timestamp in the TestReqID field as it is useful to verify that the Heartbeat is the result of the Test Request and not as the result of a regular timeout.

Tag #	Field Name	Req'd	Comments
	Standard Header	Y	MsgType = 1
112	TestReqID	Y	A timestamp string is suggested for TestReqID
	Standard Trailer	Y	

Resend Request

The Resend Request initiates the retransmission of messages. It can be used to request a single message, a range of messages, or all messages which follow a particular message.

Tag #	Field Name	Req'd	Comments
	Standard Header	Y	MsgType = 2
7	BeginSeqNo	Y	
16	EndSeqNo	Y	0 = infinity is supported. Or upper value must be specified
	Standard Trailer	Y	

Sequence Reset and Gap Fill

The sequence reset message is used by the sending application to reset the incoming sequence number on the opposing side.

Tag #	Field Name	Req'd	Comments
	Standard Header	Y	MsgType = 4
123	GapFillFlag	N	Indicates that the Sequence Reset message is replacing administrative or application messages which will not be resent. Y = Gap Fill message, MsgSeqNum field valid N = Sequence Reset, ignore MsgSeqNum
36	NewSeqNo	Y	
	Standard Trailer	Y	

Session Level Reject

The reject message is issued when a message is received but cannot be properly processed due to a session-level rule violation

Tag #	Field Name	Req'd	Comments
	Standard Header	Y	MsgType = 3
45	RefSeqNo	Y	MsgSeqNum of rejected message

58	Text	N	Possible Reject Text Message Reasons:
			    Session not open
			    Invalid message type =
			    Message must contain field #
			    Invalid value in field #
			    Sequence number lower than expected #
			    Sequence number higher than expected #
			    Session already open
			    Attempt to decrease receive sequence number #

	Standard Trailer	Y	

Logout

The logout message initiates or confirms the termination of a FIX session. Disconnection without the exchange of logout messages should be interpreted as an abnormal condition.

Tag #	Field Name	Req'd	Comments
	Standard Header	Y	MsgType = 5
58	Text	N	
	Standard Trailer	Y	

Application Messages

IBKR supports the following Application Messages:

- New Order Single
- New Order Multileg (using FIX 4.3 tags)
- Execution Reports
- Order Cancel/Replace Request
- Order Cancel Request
- Order Cancel Reject
- Order Status Request
- Bulletins

In addition to the majority of the messages that comply to the FIX 4.2 standard, IBKR supports the New Order – Multileg function using tags in the 500-700 range which were introduced in FIX 4.3. In addition, IBKR expands the New Order Single message through the use of Custom IBKR tags for the purpose of creating Conditional Orders. Please see Appendix B for a full list of IBKR's custom tags.

New Order Single: Basic

This message is used to submit a new order. IBKR supports the following basic order types:
- Market.
- Limit.
- Stop.
- Stop Limit.

Note: The FIX 4.2 standard refers to Market on Close and Limit on Close orders as being a specific order type. Conversely, it refers to Market on Open and Limit on Open as a selection in tag 59 (TimeInForce). Although IBKR believes that the terms MOC and LOC actually refer to a Time in Force specification, IBKR follows the FIX 4.2 standard in this matter.

The following tags are required on the new order single message for Basic orders. See Appendix B and C for further details on these fields.

Tag	Field Name	Req'd	Comments
	Standard Header	Y	MsgType = D
1	Account	Y	
111	MaxFloor	N	Used to create Hidden or Iceberg Orders
11	ClOrdID	Y	
15	Currency	N*	This tag is required if tag 100=SMART or if ISIN/CUSIP is used
55	Symbol	Y	
65	Symbol Suffix	N	Used for preferred symbols
48	SecurityID	N	Either CUSIP or ISIN identifier
22	IDSource	N	Either 1=CUSIP or 4=ISIN
21	HandlInst	Y	
54	Side	Y	
38	OrderQty	Y	
40	OrdType	Y	

Tag	Field Name	Req'd	Comments
18	ExecInst	N	Used to create Relative, Market Peg, Trailing Stop, and VWAP orders.
211	Peg Difference	N	Used to create Relative, Market Peg, & Trailing Stop Orders.
44	Price	N	Required depending on order type specified in tag 40
99	StopPx	N	Required for stop and stop limit orders
59	TimeInForce	N	
204	CustomerOrFirm	Y*	Used to specify Order Capacity. In lieu of 204, tag 47 or 6122 can be used to specify capacity.
58	Text	N	IBKR does not support tag 58 on orders. Orders containing tag 58 will reject.
77	OpenClose	Y*	Required for options. Also required for all orders for Omni-bus account types.
114	Affirmative Determination	Y*	Required for short sale orders involving U.S. equity securities ("stocks") when IBKR will not be the locating broker. An execution only client will indicate that the locate is being done by another (non-IBKR) broker by sending 114 = N. Clients who clear with IBKR are not required to populate this field. However, a Cleared Client does have the option to populate this tag, sending 114 = Y (meaning that IBKR is responsible for the locate).
167	SecurityType	N	Required if trading security type other than equity. Note: IBKR can accept 167=STK or 167=CS for equity.
201	PutOrCall	N	Required if 167=OPT
202	StrikePrice	N	Required if 167=OPT
204	Customer or Firm	Y	Required if tags 47 and 6122 are not present.
200	MaturityMonthYear	Y*	Required if 167=OPT or FUT
205	MaturityDay	N	Required if 167=OPT on certain markets where the MaturityMonthYear alone may cause ambiguity.
207	SecurityExchange	N	IBKR strongly encourages the inclusion of the primary exchange in tag 207 to avoid ambiguity in identification of the instrument to be traded.
231	ContractMultiplier	N	Can be used to identify option contracts in conjunction with tag 55
432	ExpireDate	N	Use this field to specify a Good Until date
126	ExpireTime	N	Use this field to specify a Good Until time and date
388	DiscretionInst	N	
389	DiscretionOffsetValue	N	
168	EffectiveTime	N	Use this field to specify a Good After time and date
100	ExDestination	Y	If "SMART" is used either tag 207 or tag 15 must be used
439	ClearingFirm	Y*	Required if execution-only client has multiple clearing firms (or CMTAs) permissioned for a single account.
440	ClearingAccount	Y*	Required for futures

Tag	Field Name	Req'd	Comments
5700	MPID	Y*	Tag 5700 is required for short sale orders involving U.S. stocks to indicate the present location of the shares that are to be delivered in connection with customer's short sale order. Customers who use IBKR as their executing broker only, must enter a valid Market Participant Identifier ("MPID") for the clearing broker or other custodian with whom the customer has arranged to borrow the shares that are to be delivered in connection with customer's short sale order. A list of MPID's is located at: http://www.interactivebrokers.com/MPIDlist. If you do not see a valid MPID for your clearing broker or custodian, you must send an e-mail to: proserve@interactivebrokers.com. (Note: if more than one MPID needs to be included, you can list more than one using a comma (,) as a delimiter.
6035	IBKR Local Symbol	N	
6010	Order Reference Account	N	
6058	TradingClass	N	
6086	ShortSaleRule	N	The value "1" may only be used by an IBKR customer who uses IBKR as its executing broker only, and does not use IBKR as its clearing broker (a "Non-Clearing Customer"). The value "1" may only be used by a non-clearing customer who has arranged with its usual clearing brokers or custody agent (on file with and made known to IBKR) to borrow the shares that are required to be delivered in connection with the short sale order. The value "2" may only be used by a non-clearing customer.
	Standard Trailer	Y	

IBKR SMART Routing

When specifying a product, if "SMART" is specified in tag 100 (ExDestination), then either tag 207 (SecurityExchange) or tag 15 (Currency) must be included as well. Specifying an exchange or currency will help specify the proper product if two different products exist with the same symbol. If tag 207 is used, it should be the primary exchange of that product. For example, US options on IBM could specify the CBOE in tag 207, US stocks could specify NYSE in tag 207. If tag 15 is used, it should represent the base currency of the country the product is listed in. Even though it is only necessary to include either tag 15 or 207, IBKR recommends including both.

Stock Security Definition

Stock orders can be routed either by ticker symbol using tag 55 (Symbol) or via security identifiers. The latter method requires CUSIP or ISIN code specified in tag 48 (SecurityID). If

tag 48 is used, tag 22 must also be included which identifies the type of code used in tag 48. Tag 55 could be omitted if stocks are identified via security identifiers. For preferred symbols, the default configuration is to expect a space between symbol and suffix (example: 'BRK B'). However, we can also support tags 55 and 65, which would be 55=BRK / 65=B.

Derivative Contract Definition

Derivative contract orders which include futures, options (including options on futures) and warrants can be routed by either by specifying either:
- Full exchange symbol in tag 6035 (IBKRLocalSymbol) and exchange in tags 207 (SecurityExchange) or 100 (ExDestination).
- Root symbol (a.k.a. Trading Class) in tag 6058 (TradingClass) or tag 55 (Symbol), followed by standard tags 200 (MaturityMonthYear), 201 (PutOrCall), 202 (StrikePrice), and 205 (MaturityDay) if necessary. In the event that similar derivative contract exists on the same underlying or trading class with the same strike, right and expiration, but with different multipliers, tag 231 (ContractMultiplier) should be used to identify the contract.

Please note that the IBKR system requires a different value "FOP" specified in tag 167 (SecurityType) for options on futures as opposed to standard "OPT" used for all securities options. Please also note that options on futures require tag 440 (ClearingAccount) specified to identify the ultimate beneficiary account, the same as futures. There is no such requirement for security options.

Note that IBKR does not support SMART routing for futures. The destination exchange must be specified in tag 100.

Foreign Exchange Definition

Tags 55 (Symbol) and 15 (Currency) are used for identifying Foreign Exchange (a.k.a. FX) currency conversions. Tag 55 represents the currency being acquired. Tag 15 represents the base currency. For example, to purchase EUR with USD it would be tagged 55=EUR, 15=USD. Tag 167 (SecurityType) should be set to CASH. Tag 38 (OrderQty) represents the number of destination currency units you wish to buy or sell. Tag 44 (Price) represents the price in base currency for one unit of destination currency. Please note that in Foreign Exchange trading the name for IBKR Smart Routing destination specified in tag 100 (ExDestination) is "IDEALPRO" instead of "SMART" which is used elsewhere.

FX Conversion Definition

To convert from one currency to another (not FX pairs trading), FIX tag 6707 must be used. Sending 6707=1 (meaning IsFXConv=yes) along with IDEALPRO in tag 100 and CASH in tag 167 will allow a conversion from one currency (tag 15) to another (tag 55).

Fixed Income Definition

Corporate, government, and municipal bond securities on all orders must be identified using ISIN via tags 48 (SecurityID) set to ISIN value and tag 22 (IDSource) set to "4". Tag 167 (SecurityType) must be set to "BOND". All bond orders must be routed using IBKR Smart Router with tag 100 (ExDestination) set to "SMART".

Please note, that IBKR system supports so-called raw and net pricing for bonds. Net prices include execution platform fees, while raw prices do not include execution platform fees. Bond execution fees on away platforms could be substantial, so it is important to properly select the

pricing type. FIX customers trading bonds have an option to choose net or raw option as applicable to limit and stop price of their order via tag 6882 (UseNetPrice). Value set to "1" would mean prices will be considered as net. If the tag is not specified or the value is set to "0", then the price will be considered raw.

Spot Definition
Spot products must be identified using tag 55 (Symbol) and routed to IBKR Smart router with tag 100 (ExDestination) set to "SMART". For instance, spot gold symbol is XAUUSD. Tag 167 (SecurityType) must be set to "CMDTY". Please see http://www.interactivebrokers.com for the list of supported spot products and corresponding symbols.

Contract for Difference Definition
Contract for Difference (CFD) products must be identified using tag 55 (Symbol) and routed to IBKR Smart router with tag 100 (ExDestination) set to "SMART". Tag 167 (SecurityType) must be set to "CFD".

Mutual Fund Definition
For all mutual fund orders, tag 55 (Symbol) must be used to identify the mutual fund being traded. Tag 100 (ExDestination) must be set to FUNDSERV. Tag 167 (SecurityType) must be set to FUND. Tag 152 (CashOrderQty) must be included, and specifies the cash value of the transaction. Mutual fund orders are acknowledged immediately. Initial fill is generated around the close of regular trading hours (e.g. 4pm EST for US mutual funds). The fill quantity reported on initial fill is 1, but a revision will follow at later time with correct quantity. All mutual fund orders must be placed as MKT orders.

Order Capacity
On all orders sent via FIX to IBKR, we require that order capacity be identified. The preferred FIX tag we use to identify order capacity if FIX tag 204 (204=0 is customer; 204=1 is firm). If it is not possible to include tag 204, we also accept FIX tags 47 or 6122. See the supported values for these tags in Appendix B on pages 64 and 77, respectively. Orders that do not contain one of these FIX tags (204, 47, or 6122) will be rejected.

Simultaneous FIX and TWS Access
It is possible to route orders to IBKR cleared or execution-only accounts from both a FIX session and a Trader Workstation (TWS) session simultaneously. Orders placed in the FIX session should be viewable on the TWS. Orders placed in one session can be modified or canceled in the other as well.

All relevant messages, pending acknowledgements, acknowledgements, pending cancels, cancel confirms, pending replace, replace, fill, and partial fill are reported in both sessions. Orders that are placed through FIX and modified on the TWS will receive a modified confirmation in the form 150=D, 39=5. Orders placed through FIX that are canceled on the TWS receive a standard unsolicited cancel message in the FIX session.

NOTE: When trading in this configuration, be careful not to submit any order types on TWS that your FIX engine cannot interpret. For example, if you are going to place a spread order on TWS, be sure your FIX certification with IBKR included spread orders.

Execution Only Orders
For execution only customers who do not clear through IBKR, we recommend to always include appropriate clearing firm ID in tag 439 (ClearingFirm). If tag 439 is not included in an order, one

of two things will happen depending on how many clearing firms are configured for that account:
- If only one clearing firm is configured for the account, the order will default to that firm if tag 439 is not included.
- If multiple clearing firms are configured for the account, the order will reject if tag 439 is not included.

Good Until and Good After Orders

 IBKR FIX customers can specify the effective date and/or time when an order should be canceled. This can be achieved by using either tag 432 (ExpireDate) or tag 126 (ExpireTime):
- If good after date and time need to be specified then tag 126 should be used. The date and time stamp should be in GMT in the following format yyyymmdd-hh:mi:ss.
- If good after date needs to be specified, then tag 432 should be used following yyyymmdd format. When using tag 432 the order will be canceled at the time traded securities stops trading on the good after date.

Similarly, you can specify the activation date and time of your order by using tag 168 (EffectiveTime). The format should be yyyymmdd-hh:mm:ss and the time should be in GMT

Short Sale Exempt Stock Orders

In response to amendments to Regulation SHO by the SEC, a US broker-dealer may mark certain qualifying US stock short sale orders "short exempt" (54=6 for single leg orders or 624=6 for multi-leg orders). SEC rule 201 identifies conditions under which US stocks traded on US national exchanges may become temporarily restricted for short sale at or below the current national best bid (NBB). An execution-only customer of Interactive Brokers which is also a US registered broker-dealer may rely on one of the exceptions defined under SEC rule 201 when placing short sale orders under the above price restriction conditions. If an exemption is claimed the order must be marked as short exempt and an exemption reason must be specified via tag 1688 (ShortSaleExemptionReason) for single leg orders, or via tag 1689 (LegShortSaleExemptionReason) for stock leg of multileg orders. The following integer values must be passed in tags 1688 and 1689 on short exempt orders.

Enum	Name	Description
0	Exception Reason Unknown	An exemption reason not provided or received
1	Incoming Short Sale Exempt	Agency broker has the customer's exemption reason, which is not explicitly provided to executing broker.
2	~~Above NBB (B/D Provision)~~	~~Broker/dealer responsible for enforcing exemption rule has determined that the order is priced one or more ticks above the national best bid (NBB) of the security to be traded.~~ Note: This exemption reason is not currently supported by IBKR. Short sale exempt orders with this exemption reason will be rejected.
3	Delayed Delivery	The broker-dealer has a reasonable basis to believe the seller owns the covered securities (pursuant to Rule 200 in the U.S.), but is subject to restrictions on delivery, provided that the seller intends to deliver the security as soon as all restrictions on deliver have been removed.
4	Odd-Lot	The broker-dealer has a reasonable basis to believe the sale is by a market maker to offset customer odd-lot orders or to liquidate an odd-lot position that changes such broker's or dealer's position by no more than a unit of trading. Note: Orders that have a quantity that is not less than one normal trading unit and have this exemption reason will be rejected.
5	Domestic arbitrage	The sale is connected to a bona-fide domestic arbitrage transaction.

Enum	Name	Description
6	International Arbitrage	The sale is connected to an international arbitrage transaction.
7	Underwriter or Syndicate Distribution	The short sale is (i) by an underwriter or member of a syndicate or group participating in the distribution of a security in connection with an over-allotment of securities; or (ii) is for purposes of a lay-off sale by an underwriter or member of a syndicate or group in connection with a distribution of securities through a rights or standby underwriting commitment.
8	Riskless Principal	The short sale by a broker or dealer effecting the execution of a customer purchase or the execution of a customer "long" sale on a riskless principal basis.
9	VWAP	The short sale order is for the sale of a covered security at the volume weighted average prices (VWAP) meeting certain criteria.

IBKR does not currently support exemption reason 2 above. Short exempt orders placed with that exemption reason will be rejected. Short exempt orders placed with exemption reason 4 above will be rejected if order quantity of single leg order in tag 38 (OrderQty) or leg order quantity determined as a product of tag 38 and tag 623 (LegRatioQty) is not less than one normal trading unit. Short exempt orders placed with rejection reasons 8 and 9 will only be accepted for done away orders.

Short exempt orders for qualifying US stocks under SEC rule 201 that are placed without exemption reason specified (via tags 1688 or 1689) will be rejected.

Customers who use Interactive Brokers clearing services or any non US registered broker-dealer customers may not submit short exempt orders. Short exempt orders entered by these categories of customers will be rejected.

Short exempt orders may be placed outside of the time interval where short sale price restriction condition is in force for a given stock. Clients may enter such orders with Good-Till time-in-force, in which case IBKR will apply the specified exception reason each time the order is routed for execution.

New Order Single: Advanced Order Types

IBKR Supports a number of advanced order types. The order types listed below can be created using the standard New Order – Single message with some modifications or additions to the tags used.

Through the use of the Pegged order type, the following order types can be created:

- Primary Peg (Relative), Market Peg, Midpoint Peg, Trailing Stop, and VWAP

The following order types can be created using additional standard FIX tags:

- Hidden, Iceberg, Discretionary, OCA

In addition, IBKR has created custom tags (6000+) to allow for the creation of:

- Conditional Orders, Auto Stops/Bracket Orders, P.I.P (Price Improvement on the BOX), Relative to Stock (Delta) order

Notes:
  (a) FIX tag 6205 is required on a number of pegged/advanced order types. 6205=1 indicates that the order is to be traded during Regular Trading Hours only. Please include this on pegged/advanced orders as needed.
  (b) Not all order types are available on all exchanges. For an updated list, please refer to the Order Types section of our website at:
      http://individuals.interactivebrokers.com/en/index.php?f=4985

Relative Order

A relative order (a.k.a. primary peg) is pegged to buy on the best bid plus an optional offset, and sell on the best ask minus an optional offset. A limit price can be set to cap these price movements to certain levels.

For a detailed description of the relative order type, see the order type page at:
http://individuals.interactivebrokers.com/en/index.php?f=613

To create a Primary Peg (relative) order:
· Set the OrdType (tag 40) to P (pegged)
· Set the ExecInst field (tag 18) to R (primary peg)
· Set the PegDifference (tag 211) to the Relative offset of your choice

To place a GTC relative order to sell 100 shares of IBM stock with a limit price of 80 and an offset of -0.5 SMART route orders:

```
8=FIX.4.2  9=0204  35=D  34=000007  43=N  52=20040212-12:2:00:01  49=client1
56=IBKR 122=20040212-12:00:01 1=U123456 11=6020 15=USD 38=100 40=P 211=.-05
18=R 55=IBM 44=80.0 54=2 59=1 100=SMART 207=NYSE 204=0 77=O 10=115
```

Market Peg

Market Peg orders are similar to Primary Pegged except that buys get pegged to the offer and

sells to the bid.

To create a Market Peg order:

- Set tag 40 (OrdType) to P (pegged)
- Set tag 18 (ExecInst) to P (market)
- Set tag 211 (PegDifference) to 0.01

To place a GTC Market Peg order to sell 100 shares of MSFT stock on ISLAND:

```
8=FIX.4.2  9=0204  35=D  34=000007  43=N  52=20190212-12:2:00:01  49=client1
56=IBKR  122=20190212-12:00:01 1=U123456 11=6021.0 38=100 40=P 211=0.01 18=P
55=MSFT  6035=MSFT 54=2 59=1 204=0 15=USD 100=ISLAND 204=0 77=0 440=U123456
10=115
```

For a detailed description of the market peg order type, see the order type page at:
http://individuals.interactivebrokers.com/en/index.php?f=616

Midpoint Peg

Midpoint Peg orders are similar to Market Peg orders, except that buys and sells are both pegged to midpoint of the National Best Bid and Offer (NBBO).

To create a Market Peg order:

- Set tag 40 (OrdType) to P (pegged)
- Set tag 18 (ExecInst) to M (midpoint)
- Set tag 211 (PegDifference) to 0.01

To place a GTC Midpoint Peg order to sell 100 shares of MSFT stock on ISLAND:

```
8=FIX.4.2  9=0204  35=D  34=000007  43=N  52=20190212-12:2:00:01  49=client1
56=IBKR  122=20190212-12:00:01 1=U123456 11=6021.0 38=100 40=P 211=0.01 18=M
55=MSFT 54=2 59=1 204=0 15=USD 100=ISLAND 207=ISLAND 204=0 10=115
```

For a detailed description of the midpoint peg order type, see the order type page at:
http://individuals.interactivebrokers.com/en/index.php?f=1058

Trailing Stop

A trailing stop is a sell order where the stop price is set at some fixed amount below the market price. If the market price rises, the stop loss price rises by this amount, but if the stock price falls, the stop loss price doesn't change. This technique allows an investor to specify a limit on the maximum possible loss, without setting a limit on the maximum possible gain. "Buy" trailing stop orders are the mirror image of sell trailing stop orders, and are used in falling markets.
To create a trailing stop order:

Method 1:
- Set tag 40 (OrdType) to P (pegged)
- Set tag 18 (ExecInst) to R (primary peg)
- Set tag 99 (StopPx) to your desired   trailing amount

Method 2:
- Set the OrdType (tag 40) to P (pegged)
- Set the ExecInst field (tag 18) to a (trailing stop peg) (FIX 4.4)
- Set the PegDifference field (tag 211) to your desired trailing amount

To place a GTC Trailing Stop order to sell 100 shares of IBM stock with a .50 trailing amount on the NYSE: (using suggested FIX 4.4 method):

```
8=FIX.4.2 9=0204 35=D 34=000007 43=N 52=20190212-12:00:01 49=compid 56=IBKR
122=20190212-12:00:01 11=6022.0 1=U123456 38=100 40=P 211=.50 18=a 55=IBM
6035=IBM 54=2 59=0 15=USD 100=NYSE 204=0 207=NYSE 10=115
```

By default, trailing stop offsets are fixed amounts. However, if Method 2 is used for the submission of trailing stop orders, it is also possible to specify a percentage trailing amount. To do this, tag 6268 (TrailingAmtUnit) is used to designate whether a stop offset amount in tag 211 should be interpreted as an absolute or a percentage.

Valid Values for tag 6268:
0 = Use absolute amount (default if 6268 is not sent)
100 = Use percentage offset amount

If tag 6268 = 100 and tag 211=5, that would be interpreted as a 5% trailing offset.
If tag 6268 = 0 (or is omitted) and tag 211=5, that would be interpreted as a 5 point trailing offset.

For a detailed description of the trailing stop order type, see the order type page at:
http://individuals.interactivebrokers.com/en/index.php?f=605

Trailing Stop Limit

IBKR also supports the submission of Trailing Stop Limit orders. Trailing stop limit orders are like trailing stop orders except that they become limit orders when triggered rather than market orders. A second offset is used to designate a limit price once the order triggers. The offset can be positive, negative, or zero. It is added or subtracted from the stop election price when the order is triggered.
The order type specified in tag 40 (OrdType) should be set to TSL.
The limit price is specified in tag 44 (Price)
The Peg Difference is specified in tag 211 (PegDifference)
The Limit offset is specified in tag 6370 (StopLimitDiff)

```
8=FIX.4.2  9=0177  35=D  34=474  49=client1  56=IBKR  52=20190225-19:51:29
1=U123456  167=CS  11=6234.0  18=R  21=2  38=100.0  40=TSL  44=15.1  6370=-0.10
211=0.50  204=0  54=2  100=SMART  15=USD  207=NYSE  55=F  60=20080225-19:51:29.234
10=142
```

For a detailed description of the trailing stop limit order type, see the order type page at:
http://individuals.interactivebrokers.com/en/index.php?f=606

Barrier / Adjustable Stop Orders

Barrier orders, (referred to as "adjustable stop" orders on the Trader Workstation), allow you to set target points, ("barriers"), which when met, modify the specifics of the order you placed. This can be used to change the stop price on a stop limit, or change the trailing amount on a trailing stop order, or even change a trailing stop into a stop or stop limit.

Barrier orders apply to the following order types:

- Stops
- Stop Limits
- Trailing Stops
- Trailing Stop Limits

The following custom FIX tags are used to accomplish this..

Tag	Field Name	Req'd	Comments
6257	NoBarriers	Required if any barriers are to be included in a supported order	Specifies the number barriers. (multiple barriers can be set for an order)
6258	BarrierPrice	Required if tag 6257 > 0	Specifies the barrier trigger price
6259	BarrierStopPrice	Required if included on any other barrier definitions for that same order	Specifies the new stop price for the order once the barrier price is reached
6260	BarriertrailingAmt	Required if included on any other barrier definitions for that same order	Specifies the new trailing amount (absolute or percentage depending on tag 6269) for the order once the barrier price is reached
6261	BarrierPriceDelimter	Required for all barrier orders	Specifies the new order type when the barrier is reached. 3 = Stop 4 = Stop Limit T = Trailing Stop TSL = Trailing Stop Limit
6262	BarrierLimitPrice	Required if included on any other barrier definitions for that same order	Specifies the new limit price for the order once the barrier price is reached
6269	BarrierTrailingAmtUnit	If omitted trailing stop orders default to 1 = absolute	Specifies whether the BarrierTrailingAmt specified in tag 6260 should be interpreted as a percentage or absolute number 0 = absolute number 100 = percentage

Tags 6258 through 6269 can be repeated to include multiple barriers.
When multiple barriers are used, the BarrierPrice (trigger price for the barrier) for each subsequent barrier must move in the same direction.
For Buy orders, each subsequent barrier trigger price must be less than the prior.
For Sell orders, each subsequent barrier trigger price must be greater than the prior.

Repeating tags that are sent in one of the barrier definitions must be sent in all other barrier definitions. Tags that may not apply to a specific order type may be left blank. (6262=) For that reason, it is recommended that if the order type is to be changed in subsequent barriers, include all tags on all barrier definitions, leaving those that are unnecessary blank.

Barrier definitions can be modified using the standard message type 35=G as long as the condition in the active barrier has not yet been met. Once the condition of the barrier has been met, the order can no longer be modified.

For a detailed description of adjustable stops, see the order type page at:
http://individuals.interactivebrokers.com/en/index.php?f=574

Hidden / Iceberg Orders

A Hidden order allows you to submit an order (generally a large volume order) without publicly disclosing the order information.

An Iceberg order allows you to submit an order (generally a large volume order) while publicly disclosing only a portion of the submitted order. Iceberg orders are available for smart routed US equity, Xetra routed, and Globex routed orders. Iceberg orders are exchange native except for Globex where they are simulated by IBKR.

- To create a Hidden order, include tag 111 with a value of 0. Hidden orders are valid on ISLAND only.
- To create an Iceberg order, include tag 111 with a number representing the number of shares reflected.

For a detailed description of hidden and iceberg orders, see the order type pages at:
http://individuals.interactivebrokers.com/en/index.php?f=596
and
http://individuals.interactivebrokers.com/en/index.php?f=595

Guaranteed VWAP Orders

IBKR supports guaranteed VWAP orders for large cap US stocks. The VWAP for a stock is calculated by adding the dollars traded for every transaction in that stock ("price" x "number of shares traded") and dividing the total shares traded.
A VWAP is computed from the open of the market to the market close, and is calculated by volume weighting all transactions during this time period.

To create a VWAP order:
- Set tag 40 (OrdType) to P (pegged)
- Set tag 18 (ExecInst) to W (peg to VWAP)
- Set tag 100 (ExDestination) to VWAP

To buy 100 shares of IBM stock VWAP:

```
8=FIX.4.2  9=0204  35=D  34=000007  43=N  52=20190212-12:02:00:01  49=client1
56=IBKR 122=20040212-12:00:01 11=6023.0 38=100 18=W 40=P 55=IBM 167=CS 54=1
59=0 47=A 100=VWAP 15=USD 204=0 10=099
```

An execution report is sent immediately with a zero price. A trade restatement is later sent replacing the zero price with the VWAP price.

For a detailed description of our guaranteed VWAP orders, see the order type pages at:
http://individuals.interactivebrokers.com/en/index.php?f=603

Discretionary Orders

A Discretionary Order is a limit order for which you define a discretionary amount (which is added to or subtracted from the limit price) that increases the price range over which the order is eligible to execute. The original limit price is displayed to the market.

To create a discretionary order, tags 388 (DiscretionInst) and 389 (DiscretionOffset) must be used in addition to the regular order tags.

Tag 388 is used to identify the price a discretionary offset is related to. IBKR only supports 0 = Related to displayed price. Tag 389 is used to specify the discretion offset.

For a detailed description of Discretionary orders, see the order type pages at: *http://individuals.interactivebrokers.com/en/index.php?f=585*

One Cancels All Orders

Orders in a One-Cancels-All ("OCA") group of orders will be canceled when one of the other orders in that same group is executed or canceled. Open order quantity for orders that are linked using an OCA group will be reduced proportionally when a linked order partially executes.

OCA groups can be specified using tag 583 (ClOrdLinkID)

Tag 583 must contain the word "IBKROCAGROUP" and be followed by a name you assign to the OCA group. Example: 583=IBKROCAGROUP group1

For a detailed description of an OCA order, see the order type pages at: *http://individuals.interactivebrokers.com/en/index.php?f=617*

Auto Stop / Bracket Orders

It is possible to submit orders which are contingent upon the execution of another order. This is used to create Auto Stops and Bracket Orders.

Auto Stops are stop orders which are not submitted until a parent order fills.

Bracket Orders involve an OCA group of orders which are not submitted until a parent order fills.

Tag 6107 (ParentClientID) is used in a Child order to specify the original clientOrderID of the Parent order. Although acked immediately, child orders will not be submitted until the parent order fills. Partial executions of the parent order will activate the respective quantity of the child orders. Attention must be given to the number of contracts/shares executed on the parent order to determine what is actively working on the child orders.

For a detailed description of a bracket order, see the order type page at: *http://individuals.interactivebrokers.com/en/index.php?f=583*

Price Improvement Auction Orders

Interactive Brokers' customers submitting Smart marketable options orders will have their orders routed to BOX when BOX is at the NBBO, and Interactive Brokers has information that there is an NBBO improvement order on the opposite side of the trade, in which case your order will be exposed to a price improvement auction.

For option orders routed to the Boston Options Exchange (BOX) you may elect to participate in the BOX's price improvement auction in pennies. All BOX directed price improvement orders are immediately sent from Interactive Brokers to the BOX order book, and when the terms allow, IBKR will evaluate it for inclusion in a price improvement auction based on price and volume priority. Enter your order price in penny increments, and it will be rounded to the nearest listed increment in favor of the order (bids and offers will continue to be listed in increments of $0.05 or $.10) until the start of the auction. Should an auction start, your improvement amount will be the absolute difference of your order price in pennies and your rounded listed price. You may choose one of the following auction strategies using tag 6173 (DiscretionaryType). Valid values are:

- 1 = Discretionary Matching (passive) – you will participate in the auction by matching the current auction price, but will not exceed your price improvement amount.
- 2 = Discretionary Improving (aggressive) – you will participate in the auction by bidding higher (offering lower) than the current auction price, but will not exceed you price improvement amount.
- 3 = Transparent (fixed) – your full price improvement amount will be submitted at the start of the auction.

If no value is specified Discretionary Matching (1) will be used by default.

For a detailed description of Price Improvement Auction order, see the order type page at: *http://individuals.interactivebrokers.com/en/index.php?f=614*

Pegged to Stock (Delta) Orders

Pegged to stock orders are currently supported only on Boston Options Exchange.

Using the IBKR custom value of "s" in tag 18 (ExecInst), it is possible to create an option order which is pegged to the price of a stock using a specific delta. The order works as follows. For the limit order that you specify, you can specify a reference price, a delta, and a high and low range in which the order is active. When the order is active, the limit price will be modified using the following formula.

(midpoint – refprice) * (delta/100)

To create a delta order, the following tags must be used:

- Tag 40 (OrdType) set to "P" designates the order type as pegged.
- Tag 18 (ExecInst) set to "s" (custom IBKR value) designates the order as "pegged to stock".
- Tag 6151 (StockRefPrice) designates the reference price for the order. This is the price that the midpoint is compared to.
- Tag 6152 (StockRangeLower) designates the lower price limit. If the stock goes below

this price, the order is canceled.

- Tag 6153 (StockRangeUpper) designates the upper price limit. If the stock goes above this price, the order is canceled.
- Tag 6154 (Delta) designates the delta to be used. Valid values: (-100 to 100).
- Tag 99 (StopPx) used for this order type as the "Starting" Limit price for the order.
- Tag 6271 (CheapToReroute) must be specified and set to 1 as an acknowledgement by the client that IBKR will not (re)route non-marketable orders to exchanges that charge cancellation fees.

Sessions can be configured to receive new acknowledgments each time the limit price is changed. The acks will appear with 39=0, 150=0, and the new limit price in tag 44. The original order specifications will also be included.

Please note that the order IDs will remain the same on each of the acknowledgements, although the limit price changes.

For a detailed description of a Pegged-to-Stock order, see the order type page at: *http://individuals.interactivebrokers.com/en/index.php?f=615*

Conditional Orders

The conditions attached to a Conditional order state that the order will automatically be submitted OR cancelled only if specified criteria for one or more defined contracts are met. You can specify stocks, options, futures or security index criteria to trigger a conditional order.
Conditional orders can be created using IBKR custom defined tags. The following tags are used in addition to the standard tags in a New Order Single message.

Tag	Field Name	Req'd	Comments
6136	ConditionListSize	Y	Required only once for a conditional order
6128	ConditionIgnoreRth	N	Required only once for a conditional order
6579	CondSubmitCancel	Y	Required only once for a conditional order
6124	CondExch	Y	Repeated for each condition
6125	CondPrice	Y	Repeated for each condition
6126	ConditionOperand	Y	Repeated for each condition
6127	ConditionTriggerMethod	N	Repeated for each condition
6137	ConditionLogic Operant/Binder	Y	Repeated for each condition (except ConditionType=Trade)
6165	ConditionUnderlying	Y	
6166	ConditionStrike	N	Required if the condition is on an option
6167	ConditionRight	N	Required if the condition is on an option
6168	ConditionExpiry	N	Required if the condition is on an option or future
6169	ConditionSecurityType	Y	
6170	ConditionLocalSymbol	Y*	Required if tag 6165 is not used
6217	CondPrimaryExch	N	Used if condition symbol would be otherwise ambiguous
6218	CondCurrency	N	Used if condition symbol would be otherwise ambiguous
6222	ConditionType	N	Used if sending ConditionType other than Price (default if tag 6222 not specified) is desired. 1=Price, 3=Time, 4=Margin Cushion, 5=Trade, 6=Volume
6223	ConditionTime	N	Required if 6222=3, format: yyyymmdd-hh:mm:ss
6245	ConditionMargin	N	Required if 6222=4, format: integer
6246	ConditionExecutionPattern	N	Required if 6222=5, format: string

Tag	Field Name	Req'd	Comments
6263	ConditionVolume	N	Required if 6222=6, format: integer

To create a conditional order based on price:
- Tags 6136, 6128 & 6579 must be included only once in the message.
- Tags 6124, 6125, 6126, 6127, & 6137 are repeated for each condition.

Example Conditional Orders based supported Condition Types:

Price

To buy 1 IBM Oct12 230 call for a price of 2 using SMART Routing GTC if the price of IBM Stock >= 200 using Double Bid Ask on a best quote:

```
8=FIX.4.2 9=0204 35=D34=000007 43=N 52=20190212-12:02:00:01 49=client1
56=IBKR 122=20190212-12:00:01 11=6028.0 38=100 40=2 55=IBM 15=USD 167=OPT
201=1 202=230.0 200=201910 44=2 54=1 59=1 204=0 100=SMART 77=O 6136=1 6128=1
6579=0 6165=IBM 6169=CS 6218=USD 6124=SMART 6125=200 6126=>= 6127=1 6137=n
10=248
```

Time

To buy 1 IBM Oct12 230 call for a price of 2 using SMART Routing GTC if time >= 20120427-14:14:34

```
8=FIX.4.2 9=0204 35=D 34=000007 43=N 52=20190212-12:02:00:01 49=client1
56=IBKR 122=20190212-12:00:01 11=6024.0 38=100 40=2 55=IBM 15=USD 167=OPT
201=1 202=230.0 200=201910 44=2 54=1 59=1 204=0 100=SMART 77=O 6136=1 6128=1
6579=0 6222=3 6126=>= 6223=20190427-14:14:34 6137=n 10=248
```

Margin Cushion

To buy 1 IBM Oct12 230 call for a price of 2 using SMART Routing GTC if the margin cushion <= 50 %:

```
8=FIX.4.2 9=0204 35=D3 4=000007 43=N 52=20190212-12:02:00:01 49=client1
56=IBKR 122=20190212-12:00:01 11=6033.0 38=100 40=2  55=IBM 15=USD 167=OPT
201=1 202=230.0 200=201910 44=2 54=1 59=1 204=0 100=SMART 77=O 6136=1 6128=1
6579=0 6222=4 6126=>= 6245=50 6137=n 10=248
```

Trade

To buy 1 IBM Oct12 230 call for a price of 2 using SMART Routing GTC if a trade occurs for BAC@NYSE STK:

```
8=FIX.4.2 9=0204 35=D 34=000007 43=N 52=20190212-12:02:00:01 49=client1
56=IBKR 122=20190212-12:00:01 11=6042.0 38=100 40=2 55=IBM 15=USD 167=OPT
201=1 202=230.0 200=201910 44=2 54=1 59=1 204=0 100=SMART 77=O 6136=1 6128=1
6579=0 6222=5 6246=symbol=BAC; exchange=NYSE; securityType=CS; 6137=n 10=248
```

Volume

To buy 1 IBM Oct12 230 call for a price of 2 using SMART Routing GTC if BAC@NYSE volume >= 300,000:

```
8=FIX.4.2 9=0204 35=D 34=000007 43=N 52=20190212-12:2:00:01 49=client1
56=IBKR 122=20190212-12:00:01 11=6035.0 38=100 40=2  55=IBM 15=USD 167=OPT
201=1 202=230.0 200=201910 44=2 54=1 59=1 204=0 100=SMART 77=O 6136=1 6128=1
6579=0 6222=6 6165=BAC 6169=CS 6218=USD 6124=NYSE 6263=300000 6126=>= 6137=n
10=248
```

For a detailed description of Conditional orders, see the order type page at:

ISE Facilitation Orders

An ISE facilitation order is a complex order type where a customer originated order (originating order) is placed by a market participant together with an instruction to trade against, (up to 40%) of that order acting as principal (counter-party order).

The facilitation order consists of the following tags added to a standard option order message.

Tag	Field Name	Req'd	Comments
6281	tXcrossC1OrdID	Y	Firm side for C1OrdID (firm equivalent to tag 11)
6282	tXCrossClearingFirm	N	Firm's ClearingFirm (firm equivalent to tag 439)
6283	tXCrossClearingAccount	N	Firm's ClearingAccount (firm equivalent to tag 440)
6284	tXCrossOpenClose	Y	Firm's OpenClose (firm equivalent to tag 77)
6285	tXCrossOptionAcct	Y	Firm's OptionAcct (firm equivalent to tag6122)
6286	tFacilitationPercentage	N	Desired percentage
6390	SolicFacilIndicator	N	Indicates Facilitation or Solicitation. Valid Values: FACIL , SOLIC. If omitted, defaults to Facilitation. Solicitation orders require a quantity greater then 500.
6396	sprdCrossOpenClose	Y	Required for SPREADS. Indicates the position effect for the facil/solic side of a spread order. This is to be included in the repeating groups for each leg.
6401	sprdCrossSide	Y	Required for SPREADS. Indicates the leg side for the facil/solic side of a spread order. This should be set to the opposite of the originating side for a given leg. This is to be included in the repeating groups for each leg.

ISE facilitation orders:

- Must have Fill-Or-Kill (FOK) time in force
- Must be routed to the ISE
- SMART routed orders will only go to the ISE
- Can't be modified
- Are either canceled ("killed") by the exchange, filled for originating side only, or filled for

both originating and counter party sides.

- Orders for quantities of 499 or less must be tagged as Facilitation orders
- Orders for quantities of 500 or more can be tagged as either Facilitation of Solicitation orders
- If not specified in tag 6390, Facilitation is used by default
- Customer/Customer crosses are designated by setting tag 6285=c

```
8=FIX.4.2 9=309 35=AB 52=20190610-15:45:45 34=605 56=IBKR 49=client1 11=872.0
55=MSFT 38=100 54=1 40=2 44=1 59=1 6205=1 15=USD 100=SMART 204=0 167=MULTILEG
555=2 600=MSQ 609=OPT 608=OPXXXX 610=201901 612=27.5 614=100 564=O 623=1
624=1 600=MSFT 609=STK 608=ESXXXX 614=100 623=100 624=2 10=128
```

Pair Trades

Pair trades can be used to hedge once contract against another, generally in the same industry. Offset a price discrepancy between the two contracts with a ratio.

Special tags of child order:
> HedgeType(6665) = 3 (PairTrade)
> HedgeRatio(6666) = <Rate used to compute child order size>(For the 1.8 as in example and parent order size = 100, 180 will be used for child)
> ClOrdLinkID(583) = OCA group name
> ParentClientId(6107) = <parent client order ID - used to pair with parent order>
> OrderReference(6010) = GUI-related informational field

Parent Order

```
FIX <- 1526409711.659 8=FIX.4.2 9=168 35=D 34=9474 49=client1 56=IBKR
52=20180515-18:41:51.657 38=100 40=2 11=order_39 21=1 55=IBM 54=1
60=20180515-18:41:51.657 59=0 15=USD 100=SMART 44=141 1=U123456 204=0 10=016
```

Child Order

```
FIX <- 1526409725.595 8=FIX.4.2 9=223 35=D 34=9475 49=client1 56=IBKR
52=20180515-18:42:05.593 6665=3 6666=1.6 583= IBKROCAGROUPgroup1
6107=order_39 6010=PairTest1 38=100 40=2 11=order_40 21=1 55=IBM 54=1
60=20180515-18:42:05.593 59=0 15=USD 100=SMART 44=141 1=DU91980 204=0 10=111
```

IBKR Algorithmic Orders - Stock

IBKR's stock algorithms are used to optimally parse large volume orders using IBKR's proprietary mathematical models. These models use historical price and volume data in conjunction with user-defined risk and volume inputs. For up-to-date list of Algorithmic Order Types offered by IBKR please refer to the [Order Types and Algos](#) page on the IBKR Web Site.

Algorithmic orders are canceled using the standard 35=F message type.

Algorithmic orders can be modified using the standard 35=G order type. Any algorithmic specific value can be modified. If the type of the algorithmic order remains the same, the order continues working using the new parameters (i.e. passive to aggressive). If the algorithmic order type is modified, the order is handled as if it were a new algorithmic order for the remaining quantity from that point on.

If an order is sent with instructions to deactivate on the close, a modify message will need to be sent in order to reactivate the order.

Method 1: Repeating Groups of tags 5958 and 5960

Tag	Field Name	Req'd	Comments
18	tExecInst	Y	e (custom value used for IBKR algos)
847	tTargetStrategyName	Y	ArrivalPx PctVol Vwap
849	tParticipationRate	Y*	Set as percentage. *Required to set maximum participation rate for VWAP and Arrival Price algos
5957	tNoStrategyParameters	Y*	# Strategy Parameters Specified – *needs to be set to the number of 5958 tags included in the order. Typically set to 0, 1, or 2. Allows for riskAversion/pctVol AND forceCompletion
5958	tStrategyParameterName	Y	riskAversion pctVol forceCompletion
5960	StrategyParamterValue	Y	Aggressive Passive Neutral Get Done If 5958=pctVol, 5960 should be set to the participation percentage.
6436	tDeactiveateOnClose	Y	1=deactivate the order at the end of the day. 0=do not deactivate at the end of the day.

Arrival Price

Attempts to achieve the bid/ask midpoint price at the time the order is submitted, taking into account the user-assigned level of risk aversion which defines the pace of the execution, and the user-defined target percent of average daily volume.

User Inputs:
- Max Percentage of Average Daily Volume
- Urgency / Risk Aversion Level
- Attempt Completion by EOD

Place an order to buy up to 10,000 shares, attempting to pay the current arrival price or better, not to exceed a quantity of 1% of the daily volume. Set the risk aversion level to "Passive". Force Completion by the end of the day.

847=ArrivalPx

849=0.01
5957=2
5958=riskAversion
5960=Passive
5958=forceCompletion
5960=1

```
8=FIX.4.2 9=000256 35=D 34=000002 56=IBKR 49=compid 52=20190312-20:17:40
54=1  167=CS  60=20190120-15:13:54  18=e  38=100  44=1.80  847=ArrivalPx 5957=2
849=0.01 6436=0 204=0 55=IBM 59=0 40=2 100=SMART 11=a003 21=2 15=USD 77=O
5958=riskAversion 5960=Passive 5958=forceCompletion 5960=1 1=U123456 10=207
```

Percent of Volume

Percent of volume algorithm attempts to participate with volume at a user-defined rate. Order quantity and volume distribution over the day is determined using the target percent of volume you entered along with continuously updated volume forecasts calculated from TWS market data.

User Inputs:

- Target percentage of participation of the Average Daily Volume

Place an order to buy up to 10,000 shares at a not to exceed 22.22% of the daily volume.

847=Pctvol
5957=1
5958=pctVol
5960=0.2222

```
8=FIX.4.2 9=000249 35=D 34=000002 56=IBKR 49=client1 52=20190312-19:30:53
1=U123456 54=1 167=CS 60=20190120-15:13:54 18=e 38=10000 44=1.80 847=PctVol
5957=1 5958=pctVol 5960=0.2222 6436=0 204=0 55=IBM 59=0 40=2 100=SMART
11=6578.0 21=2 15=USD 77=O 10=207
```

Non-Guaranteed VWAP

Non-guaranteed VWAP attempts to achieve the Volume-Weighted Average execution price (VWAP). By default the price is calculated from the time the order is submitted to the time the market closes. Alternatively, the start and/or end time can be specified to designate when the algo begins working and ends working, regardless of whether or not the entire quantity has been filled. The VWAP price is then calculated for specified start and end period.

User Inputs:
- Max Percentage of Average Daily Volume
- Start Time/End Time

Place an order to buy up to 10,000 shares paying the Volume Weighted Average Price between the time you place the order and the close, not to exceed 1% of the daily volume.

847=Vwap
849=0.01

5957=0

```
8=FIX.4.2 9=000232 35=D 34=000002 56=IBKR 49=client1 52=20190312-19:44:21
1=U123456 54=1 167=CS 60=20050120-15:13:54 18=e 38=10000 44=1.80 847=Vwap
5957=0 849=0.01 6436=0 204=0 55=IBM 59=0 40=2 100=SMART 11=a002 21=2 15=USD
77=O 10=230
```

TWAP Algo

TWAP Algo attempts to achieve the Time-Weighted Average execution price. By default it is calculated from the time you submit the order to the time it completes. Alternatively, the start and/or end time can be specified to designate when the algo beings working and ends working, regardless of whether the entire quantity has been filled. Please note that TWAP price is not guaranteed.

User Inputs:
- Strategy type (trade when):
  - Matching Midpoint
  - Matching Same Side
  - Matching Last
  - Marketable
- Start Time/End Time
- Allow trading past end time

Place an order to buy up to 10,000 shares paying the time-weighted average prices between 11 am and 2 pm EST, allow the algo to continue past the specified end time if the full quantity has not been filled. Make the algo execute when the order is marketable.

847=Twap
5957=4
5958=strategyType
5960=Marketable
5958=startTime
5960=20101104-15:00:00
5958=endTime
5960=20101104-18:00:00
5958=allowPastEndTime
5960=1

```
8=FIX.4.2 9=000232 35=D 34=000002 56=IBKR 49=client1 52=20190312-19:44:21
54=1 167=CS 60=20190120-15:13:54 18=e 38=10000 44=1.80 847=Twap 5957=4
5958=strategyType 5960=Marketable 5958=allowPastEndTime 5960=1
5958=startTime 5960=20191104-15:00:00 5958=endTime 5960=20191104-18:00:00
849=0.01 6436=0 204=0 55=IBM 59=0 40=2 100=SMART 11=a002 21=2 15=USD 77=O
10=230
```

Method 2: Distinct Tags for IBKR STK ALGO Strategy Parameters

VWAP:

```
ExecInstr                18=e
TargetStrategyName       847=Vwap
*ParticipationRate       849=[percentage value between 0.00 and 1.00]
*StartTime               8708=[format yyyymmdd-hh:mm:ss]
*EndTime                 8702=[format yyyymmdd-hh:mm:ss]
*AllowPastEndTime        8700=[1=yes, 0=no]
```

Percentage of Volume:

```
ExecInstr                18=e
TargetStrategyName       847=PctVol
PctVol                   8706=[Target percentage of participation of the
                         Average Daily Volume…value should be between 0.00 and
                         1.00]
*StartTime               8708=[format yyyymmdd-hh:mm:ss]
*EndTime                 8702=[format yyyymmdd-hh:mm:ss]
```

Arrival Price:

```
ExecInstr                18=e
TargetStrategyName       847=ArrivalPx
ParticipationRate        849=[percentage value between 0.00 and 1.00]
RiskAversion             8707=[one of these 4 values: Aggr/Pass/Neut/GetDon]
*StartTime               8708=[format yyyymmdd-hh:mm:ss]
*EndTime                 8702=[format yyyymmdd-hh:mm:ss]
*ForceCompletion         8703=[1=true, 0=false]
```

TWAP:

```
ExecInstr                18=e
TargetStrategyName       847=Twap
*ParticipationRate       849=[percentage value between 0.00 and 1.00]
*StartTime               8708=[format yyyymmdd-hh:mm:ss]
*EndTime                 8702=[format yyyymmdd-hh:mm:ss]
*AllowPastEndTime        8700=[1=yes, 0=no]
```

Dark Ice:

```
ExecInstr                18=e
TargetStrategyName       847=DarkIce
DisplaySize              8701=[integer]
*StartTime               8708=[format yyyymmdd-hh:mm:ss]
*EndTime                 8702=[format yyyymmdd-hh:mm:ss]
*AllowPastEndTime        8700=[1=yes, 0=no]
```

Accumulate/Distribute:

```
ExecInstr                    18=e
TargetStrategyName           847=AD
*StartTime                   8708=[format yyyymmdd-hh:mm:ss]
*EndTime                     8702=[format yyyymmdd-hh:mm:ss]
*Component Size              8712=[integer] - quantity
*TimeBetweenOrders          8713=[integer] - seconds
*RandomizeTime +/- 20%      8714=[1=yes, 0=no]
*Randomize Size +/- 55%     8715=[1=yes, 0=no]
*GiveUp                      8716=[1=yes, 0=no]
*CatchUp                     8715=[1=yes, 0=no]
*WaitForFill                 8716=[1=yes, 0=no]
```

Adaptive:

```
ExecInstr                    18=e
TargetStrategyName           847=Adaptive
AdaptivePriority             8719=[Urgent / Normal / Patient]
```

*=optional

IBKR Algorithmic Orders - Options

IBKR's option algorithms are used to optimally parse large volume orders using IBKR's proprietary mathematical models. These models use historical price and volume data in conjunction with user-defined risk and volume inputs. IBKR currently offers two option algo types, described below.

Algorithmic orders are canceled using the standard 35=F message type.

Algorithmic orders can be modified using the standard 35=G order type. Any algorithmic specific value can be modified. If the type of the algorithmic order remains the same, the order continues working using the new parameters (i.e. passive to aggressive). If the algorithmic order type is modified, the order is handled as if it were a new algorithmic order for the remaining quantity from that point on.

Accumulate/Distribute:

Tag	Field Name	Req'd	Comments
18	tExecInst	Y	e (custom value used for IBKR Algos)
847	tTargetStrategyName	Y	MinImpact BalanceImpactRisk
849	tParticipationRate	Y*	Set as percentage in decimal form. 15% would be sent as 849=0.15 *Required to set maximum participation rate for MinImpact and BalanceImpactRisk algos

Tag	Field Name	Req'd	Comments
5957	tNoStrategyParameters	Y*	# of strategy parameters specified – needs to be set to the number of 5958 tags included in the order. Typically set to 0, 1, or 2. Allows for riskAversion AND forceCompletion
5958	tStrategyParameterName	Y	riskAversion forceCompletion (required only for Strategy BalanceImpactRisk)
5960	StrategyParamterValue	Y	*When tag 5958=riskAversion, populate related tag 5960 with one of these 4 values: Aggressive Passive Neutral Get Done *When tag 5958=forceCompletion, populate related tag 5960 with 0 (false) or 1 (true) (required only for Strategy BalanceImpactRisk)

Minimize Impact

Attempts to minimize market impact by slicing the order over time to achieve a market average without going over the Max Percentage value.

User Inputs:
- Max Percentage of Average Daily Volume

Place an order to buy up to 10,000 contracts paying the Market Average Price between the time you place the order and the close, not to exceed 1% of the daily volume.

847=MinImpact
849=0.01
5957=0

```
8=FIX.4.2 9=000232 35=D 34=000002 56=IBKR 49=client1 52=20190312-19:44:21
1=U123456 54=1 167=CS 60=20190120-15:13:54 18=e 38=1000 200=20080 201=1
202=22.50 204=0 55=CSCO 59=0 40=1 100=SMART 11=4561.0 21=2 15=US 77=O
847=MinImpact 5957=0 849=0.01 10=230
```

Balance Impact and Risk

This order type attempts to balance the market impact of trading the option with the risk of price change over the time horizon of the order. The strategy considers the user assigned level of risk aversion to define the pace of the execution, along with the user-defined target percent of volume.

User Inputs:
- Max Percentage of Average Daily Volume
- Urgency / Risk Aversion Level

Place an order to buy up to 10,000 shares, attempting to pay the current arrival price or better, not to exceed a quantity of 5% of the daily volume. Set the risk aversion level to "Passive". Force Completion by the end of the day.

847=BalanceImpactRisk
849=0.05
5957=2
5958=riskAversion
5960=Passive
5958=forceCompletion
5960=1

```
8=FIX.4.2 9=000256 35=D 34=000002 56=IBKR 49=client1 52=20190312-20:17:40
1=U123456 54=1 167=CS 60=20050120-15:13:54 18=e 38=100 200=200803 201=1
202=22.5 204=0 55=CSCO 59=0 40=1 100=SMART 11=3456.0 21=2 15=USD 77=O
847=BalanceImpactRisk 849=0.01 5957=2 5958=riskAversion 5960=Passive
5958=forceCompletion 5960=1 10=207
```

Server Managed Volatility Orders

A volatility order is an order that allows you to place an option order by specifying an implied volatility in place of a limit price. In place of a standard limit price, an order contains a volatility limit which will be calculated to a corresponding limit price. A "continuous update" flag can be set which continually modifies the calculated limit price as variables such as the underlying price change. In addition, a conditional order can be attached which will trade the underlying security against the executed option trade on a "delta" ratio calculated at the moment the option order fills.

Tag	Field Name	Req'd	Comments
44	Price	N	Only used if 6275=3
6107	ParentClientId	Y	Included only on the underlying hedge order (if included) Specifies the clientOrderID of the "parent" option volatility order.
6152	StockRangeLower	N	Underlying Price – Lower Range
6153	StockRangeUpper	N	Underlying Price – Upper Range
6275	Continuous Update	Y	2=Continuously update the price as volatility calculation changes 3=Price for main order specified by client
6279	UnderlyingRefPrice	Y	1=midpoint 2=bid or ask
6280	VolatType	Y	1=daily volatility 2=annual volatility
6290	HedgingType	Y	-1=no hedging 1=mkt hedging 2=lmt E=relative order
6458	DividendSchedule	N	yyyymmdd/value,yyyymmdd/value
6459	InterestSchedule	N	yyyymmdd/value,yyyymmdd/value
6460	IsDeltaHedge	Y	1=Hedging Order Anything else or omitted=not
6467	VolatCapPercentage	N	
6468	VolatCapTicks	N	
9816	ImpVolatility	Y	Implied Volatility in %

Interest Rates and Dividends directly affect the calculation of the implied volatilities used for these orders. If tags 6458 and 6459 are not included, default interest rate and dividend schedules are used. Default interest rate schedules for US equity options are derived from the implied yields of the Eurodollar futures. Dividends are extrapolated forward using the last paid dividend. Users are encouraged to set their own dividend schedules, particularly if dividends fall close to expirations.

Any volatility order can set a range in the underlying product. If the underlying price

prints outside this range, the order will be canceled. Tags 6152 and 6153 are used to specify this range.

Tags 6467 and 6468 are used as safety measures to indicate an amount that you would bid or offer through the implied ask and bid volatility which would result in the order being rejected. If you specified 1 in tag 6467 and the implied volatility that you specified in tag 9816 is more than 1% through the ask implied volatility on your buy order, the order would reject.

Example 1:

Place an order to sell 10 options receiving no less than a 35% implied volatility at the instant the order fills. Continuously update the order. No automatic hedge order. Default dividends and interest rates used.

```
8=FIX.4.2 9=000223 35=D 34=000002 56=IBKR 49=client1 52=20190310-17:10:40
47=A 54=2 167=OPT 60=20190120-15:13:54 38=10 6275=2 9816=35.00 6280=2 6279=2
6290=1 200=201903 201=1 1=U123456 202=22.50 204=0 55=CSCO 59=0 40=2
100=SMART 11=004 21=2 15=USD 77=O 10=233
```

Once placed, the limit price will be modified whenever volatility calculation implies a new limit price. Unsolicited modify messages will be sent in the following format: (This message type can be optionally suppressed. Notify IBKR client integration group if you do not wish to see the unsolicited modify messages)

```
8=FIX.4.2  9=000300  35=8  34=000049  43=N  52=20190310-17:14:26  49=IBKR
56=client1  37=0002a1c1.00017da2.47d55e40.0001  11=004  17=97698.1205169266.1
150=D  20=0  39=5  55=CSCO  54=2  38=1  44=2.76  32=0  31=0.00  14=0  151=1  6=0
167=OPT 200=201903 201=1 1=U123456 60=20080310-17:14:26 40=2 202=22.5 77=O
6122=b 204=1 198=NONE 6437=24.44 10=095
```

Orders can be modified with a 35=G message: This modify changes the vol from 35 to 32. (tag 6275 must also be included on modifies) ** Only tag 9816 can currently be modified.

```
8=FIX.4.2  9=000124  35=G  34=000002  56=IBKR  49=client1  52=20190310-19:26:41
41=004 11=1234.0 15=USD 1=U123456 54=2 9816=32.00 58=1 55=C 21=2 38=1 6275=2
40=2 10=240
```

Orders can be canceled with a 35=F message:

```
8=FIX.4.2  9=000089  35=F  34=000002  56=IBKR  49=client1  52=20080310-17:27:42
11=1234.1 41=1234 55=CSCO 1=U123456 54=1 38=100 10=202
```

Example 2:

Place an order to sell 10 options receiving no less than a 22 volatility premium.

```
8=FIX.4.2 9=000237 35=D 34=000002 56=IBKR 49=client1 52=20190307-20:51:43
47=A 54=2  167=OPT 60=20050120-15:13:54 38=10 6275=2 9816=22.00 6280=2 6279=2
6290=1 6210=SMART 1=U123456 11=1234.0 200=200803 201=1 202=24 204=0 55=CSCO
59=0 40=2100=SMART 11=017 21=2 15=USD 77=O 10=219
```

Then, hedge the order delta neutral with stock as soon as the option execution occurs, delta neutral.

```
8=FIX.4.2 9=000191 35=D 34=000003 56=IBKR 49=client1 52=20190307-20:51:44
47=A 54=1 60=20190120-15:13:5 1=U123456 100=SMART 204=0 59=1 40=1 38=200
11=1234.0 168=20190318-16:40:00 21=2 55=CSCO 6460=1 6107=017 15=USD 167=STK
10=119
```

Note: Quantity (tag 38) must be included on the hedge order, although the actual quantity will be determined by the calculated delta when the parent order executes.

Example 3:

Place an order to buy 10 options paying no more than a 10 volatility using a custom interest rate and dividend schedule. Cancel order if underlying stock goes below 30 or above 40.

```
8=FIX.4.2 9=000292 35=D 34=000002 56=IBKR 49=compid 52=20190311-19:37:04
47=A 54=1 167=OPT 60=20080120-15:23:54 1=U123456 38=10 6275=2 9816=10.00
6280=2 6279=2 6290=1 6152=20 6153=30 6458=20090101/1,20090201,
6459=20090101/0.04,20100101/0.05 200=200803 201=1 202=22.50 204=0 55=CSCO
59=0 40=2 100=SMART 11=1234.0 21=2 15=USD 77=O 10=219
```

Stop Trigger Methods

Trigger Method	Tag 6127 Representation	Description
Last	2	For a sell (buy) order to be triggered, one last price value must be less than (greater than) or equal to the trigger price, and the exchange or other market center where the order is to be executed must also publish (and IBKR's systems must also receive) an ask price equal to or higher than, and a bid price equal to or lower than, the trigger price.
Bid / Ask	4	For a sell (buy) order to be triggered, a single ask price (bid price) value must be less than (greater than) or equal to the trigger price.
Double Last	3	For a sell (buy) order to be triggered, two consecutive last price values must be less than (greater than) the trigger price and the exchange or other market center where the order is to be executed must also publish (and IBKR's systems must also receive) an ask price equal to or higher than, and a bid price equal to or lower than, the trigger price.
Double bid/ask	1	For a sell (buy) order to be triggered, two consecutive ask price (bid price) values must be less than (greater than) or equal to the trigger price.
Last OR Bid/Ask	7	Combines the logic of the Last method and Bid /Ask method. Order triggers when one or the other condition is met.

Please note that "Last" and "Double Last" trigger methods have leeway to trigger up to 0.5% above the ask price or up to 0.5% below the bid price. This 0.5% amount of leeway is subject to change at any time without notice.

Pre-Trade Allocation Orders

Method #1: In-message allocation instructions

IBKR allows clients to set account-based pre-trade allocation criteria within the order message. By utilizing FIX tags 78 (NoAllocs), 79 (AllocAccount) and 80 (AllocShares), order routing clients can configure the allocation parameters within the order. The number of allocations indicated in

FIX tag 78 must match the number of repeating groups of tags 79/80 following tag 78.

- IBKR master account must be placed in tag 1 (Account)
- IBKR subaccount values must be placed in tag 79

Example:

Assume an advisor (master account F2200) wants to place an order for 600 shares, wanting customer account U2201 to receive 100 shares, customer account UG2202 to receive 200 shares, and customer account U2203 to receive 300 shares. The advisor would create the following allocation order to accomplish that:

```
8=FIX.4.2 9=000280 35=D 34=000002 56=IBKR 49=client1 52=20190812-18:15:41
54=1 60=20190120-15:13:54 100=SMART 38=600 78=3 79=U2201 80=100 79=U2202
80=200 79=U2203 80=300 1=F2200 204=0 205=18 40=1 11=141539001.0 200=201009
201=1 202=25 77=O 55=CSCO 15=USD 167=OPT 10=177
```

Execution Reports

Allocated orders execute into the master account and are then reallocated out into the appropriate sub-accounts. For that reason, you will receive several execution reports for each allocated execution. For example, for the allocation example above, you would receive the 7 execution reports below.

The first execution report is initial execution into the master account.

```
8=FIX.4.2 9=000388 35=8 34=000005 43=N 52=20190812-18:15:54 49=IBKR
56=compid 37=00000364.00003b7a.4c64315d.0002 11=141539001.0
17=00003b7a.4c64319c.01.01 150=2 20=0 39=2 55=CSCO 54=1 38=600 44=0.00
32=600 30=BOX 31=0.21 14=600 151=0 6=0.21 167=OPT 200=201009 201=1 1=F2200
60=20190812-18:15:54 40=1 202=25 15=USD 77=O 204=0 205=18 55=CSCO 10=105
```

Shortly thereafter, you will see execution reports which place the pre-allocated shares into the sub-accounts.

Allocation to account U2201 of the same 100 shares:

```
8=FIX.4.2 9=000305 35=8 34=00001143=N 52=20190812-18:15:54 49=IBKR 56=client1
37=00000364.00003b7a.4c643160 11=141539001.0 17=U+00003b7a.4c6431a4.01.01
150=2 20=0 39=2 54=1 207=PSE 38=600 44=0.00 32=100 31=0.21 14=600 151=0 6=0
167=OPT 200=201009 201=1 1=U2201 60=20190812-18:15:54
40=2 202=25 6631=F2200 10=059
```

Allocation to account U2202 of the same 200 shares:

```
8=FIX.4.2 9=000305 35=8 34=000009 43=N 52=20190812-18:15:54 49=IBKR
56=client1 37=00000364.00003b7a.4c64315f 11=141539001.0
17=U+00003b7a.4c6431a2.01.01 150=2 20=0 39=2 54=1 207=PSE 38=600 44=0.00
32=200 31=0.21 14=600 151=0 6=0 167=OPT 200=201909 201=1 1=U2202
60=20190812-18:15:54 40=2 202=25 6631=F2200 10=114
```

Allocation to account U2203 of the same 300 shares:

```
8=FIX.4.2  9=000305  35=8  34=000007  43=N  52=20190812-18:15:54  49=IBKR
56=client1           37=00000364.00003b7a.4c64315e           11=141539001.0
17=U+00003b7a.4c6431a0.01.01  150=2  20=0  39=2  54=1  207=PSE  38=600  44=0.00
32=300 31=0.21 14=600 151=0 6=0 167=OPT 200=201909 201=1 439=0005 440=U2203
1=U2203 60=20190812-18:15:54 40=2 202=25 6631=F2200 10=112
```

Please note that if the client's FIX engine cannot handle the allocation messages placing the executions into the sub-account, IBKR has the ability to configure the session so that pre-allocation described above occurs but only the initial execution into the master account is relayed back via FIX. Notification of the actual allocation FIX messages is suppressed.

Method #2: Allocation Profile Reference

Allocation Profiles - Orders placed using an Allocation Profile execute initially into the master account using a single order. An Allocation Profile distributes shares to each account in a profile based on a ratio that the advisor can define.

Profiles are created by TWS users and specify a group of accounts with corresponding percentages, ratios, or number of shares/contracts. These profiles are managed within TWS, and are static in nature. Creating, changing, or removing allocation profiles require an overnight reset in order to be updated. Intra-day changes to an allocation profile is not supported.

Special Tag Used:

6161 = [Allocation Profile name]

New Order - Allocation Profile

The allocation profile file must be created prior to submitting this order type. Once that is done, you can specify an Allocation Profile by including tag 6161 in the order message.

Example: Buy 1000 shares MSFT stock at 10.20 Limit, routed using SMART, allocated using the Allocation Profile, "allocation1".

```
8=FIX.4.1 9=0197 35=D 34=0000032 52=20040811-15:41:06 11=1774861152.0 44=10.2 38=100
40=2 55=MSFT 167=CS 207=ISLAND 204=0 54=1 59=0 F123456 100=SMART 15=USD
6161=allocation1 15=USD 10=080
```

Execution reports will function as described above in method #1.

New Order Multileg

IBKR allows for the placement of Multileg (spread / combination) orders only for SMART routed orders or products traded on an exchange which electronically accept that type of order. The message format is based on the Multileg format of FIX 4.3.

IBKR supports all 2 legged combination orders, and supports 3 and 4 legged combo orders provided that the order can be traded natively on an exchange.

Use the New Order - Multileg (MsgType=AB) message to submit a multileg order. Multileg orders use Instrument Leg Block (set of repeating tags) to define the legs of a spread. Each leg of the multileg order includes LegSide (tag 624) relevant to the leg only, while tag 54 (Side) is relevant to the whole multileg order. IBKR interprets values passed in tag 44 (Price) as credit (negative value), debit (positive value) or even (zero).

Important Note. When sending a Multileg order as a sell (54=2), the sign of the legs are inverted, per FIX protocol. Meaning, if your multi-leg order lists the legs as "buy leg 1 and sell leg 2", when you send the multi-leg order as a sell (54=2), the legs will be inverted. When sending a sell (54=2) with legs as "buy leg 1 and sell leg 2", the result will be a sell of leg 1 and buy of leg 2.

Due to some FIX counterparties' inability to sync up with this logic, we recommend sending all multileg orders as a buy with the desired side listed on each leg.

Below are the tags that IBKR uses for Multileg orders. Tags marked with a "->" indicate that the tag is a part of an Instrument Leg Block (repeated for each leg).

Tag	Field Name		Req'd	Comments
	Standard Header		Y	MsgType=AB
1	Account		N*	Required for sessions that route orders to multiple IBKR accounts
11	ClientOrderID		Y	.
55	Symbol		Y	Underlying symbol
167	SecurityType		Y	MULTILEG or MLEG values are accepted. Please inform IBKR FIX integration team of the value you prefer.
38	OrderQty		Y	
54	Side		Y	
40	OrdType		Y	
44	Price		N	Required if OrderType is limit (40=2)
59	TimeInForce		N	Currently only Day (59=0) is supported for mutlileg Orders
207	SecurityExchange		Y	
15	Currency		Y	
439	ClearingFirm		Y*	Required if multiple clearing firms are on file with IBKR.
440	ClearingAccount		N	Required if spread includes FUTURES
555	NoLegs		Y	Number of legs that make up the security
->	600	LegSymbol	N	Required only if it is different from symbol
->	608	LegCFICode	Y	OC – call option, OP – put option, ES – stock
->	609	LegSecurityType	N	

44

Tag		Field Name	Req'd	Comments
->	611	LegMaturityDate	N	Required only for futures, options and warrants (replaces tag 610)
->	612	LegStrikePrice	N	Required only for options and warrants
->	616	LegSecurityExchange	N	Required for IBKREFP combos
->	623	LegRatioQty	Y	.
->	624	LegSide	Y	1=Buy, 2=Sell
->	614	LegContractMultiplier	N	.
->	654	LegRefID	N	Identifies the leg for subsequent references
->	564	LegPositionEffect	Y	Possible Values: O (Open) or C (Close)
->	6215	LegLocateReqd	Y1	N = Shares are with customer's clearing broker Y = Shares are with IBKRKR ("Y" may only be indicated if the customer clears through IBKRKR).
->	6216	LegLocateBroker	Y1	Clearing broker's or custody agent's MPID.
->	6680	LegClearingFirm	N	Per-Leg clearing firm for multi-leg orders. Order should contain blank values for all legs except stock legs
6086		ShortSaleRule	Y1	Indicates that the customer has arranged with a clearing broker or custody agent to borrow the shares required to be delivered in connection with the short sale. Valid values are "1" or "2".
6248		SmartComboGuarantee	N	0 = guaranteed 1 = non-guaranteed *6248=1 required for STK/STK combo orders
		Standard Trailer	Y	.

New Order Message – Sell 1 Spread defined as (Buy 1 OIH Oct04 85 Call and Sell 1 Oct04 90 Call) for a limit of .80 (because it is defined as a sell in tag 54, .80 will be interpreted as a credit)

```
8=FIX.4.2 9=303 35=AB 52=20191001-15:57:59 34=27414 56=IBKR 49=client1
11=3690702.0 55=OIH 38=1 54=2 40=2 44=0.8000 59=0 15=USD 207=ISE 204=0 47=A
1=U123456 167=MULTILEG 555=2 600=OIH 609=OPT 608=OCXXXX 610=201910 612=85
614=100 564=O 623=1 624=1 600=OIH 609=OPT 608=OCXXXX 610=201910 612=90
614=100 564=O 623=1 624=2 10=169
```

Order Modification

Modification of a Multileg Order: IBKR supports message type 35=AC. Only the quantity or price can be modified. The values passed in the Instrument Leg Block tags on modify messages do not affect the order parameters. It is suggested to not include them in the cancel/replace message.

Cancellation

Multileg orders are canceled using the Order Cancel Request (MsgType = F). The entire multileg order is cancelled by tag 37 (OrderID) or tag 11 (ClOrdID). It is not possible to cancel one leg of a multileg order without canceling the entire multileg order.

Orders with Stock Leg

When creating a combination order which includes a leg that is a stock, it is necessary to include the stock leg last (with the necessary regulatory tags 6086, 6215, & 6216). Also, leg

multiplier for a stock leg should be in 100 increments (i.e. 100, 200, 300, etc.)

If a multi-leg order includes a leg which involves the short sale of a US equity, the appropriate regulatory tags 624, 6086, 6215 and/or 6216 must be included. For multi-leg stock orders, tag 624 is used to indicate that the order is a short sale (value = "5").

Customers who do not clear their trades through Interactive Brokers may either:

- Use Tag 6086 with a value = "1" to indicate that the customer has arranged with its clearing broker or custody agent (the Clearing Firm designated in Tag 439 on the order) to borrow the shares that are to be delivered in connection with the short sale tag; and Tag 6215 with a value = "N"; or

- Use Tag 6086 with a value = "2" to indicate that the customer has arranged with a clearing broker or custody agent other than the Clearing Firm designated in Tag 439 on the order; Tag 6215 with a value = "N" to indicate that the customer has arranged with such clearing broker or custody agent to borrow the shares that are to be delivered in connection with the short sale order; and Tag 6216 to indicate the MPID of such clearing broker or custody agent.

Customers who clear through Interactive Brokers should:

- Use Tag 6215 = "Y" to indicate that IBKR will borrow the shares that are to be delivered in connection with the short sale. If customer wishes to also use Tag 6216, the value must be IBKRKR (Interactive Brokers).

Note: Tag 616 must be included on the legs with an exchange designation for each leg.
Tag 55 not required
If one of the legs is a short-sale, tags 6215 and 6216 must be included on both legs.
The leg that isn't a short sale would include tags 6215 and 6216 set to null.

```
8=FIX.4.2 9=000311 35=AB 34=000002 56=IBKR 49=client1 52=20191005-
15:01:15 11=110114001.0 38=100 54=1 40=2 44=51.70 59=0 15=USD
100=SMART 1=U123456 204=0 167=MULTILEG 555=2 600=MSFT 609=STK
608=ESXXXX 614=100 616=ISLAND 564=O 623=1 624=2 612= 614= 610= 600=IBM
609=STK 608=ESXXXX 564=O 623=1 616=ISLAND 624=1 612= 614= 610= 10=234
```

Orders with Futures Leg

When creating a combination order which includes legs that are futures, tag 440 (ClearingAccount) must be included once in the message.

Note: Tag 616 must be included on the legs with an exchange designation for each leg.

For example, buy 1 spread defined as selling the IBM Nov Single Stock Futures and buying IBM STK for a debit of $0.10:

```
8=FIX.4.2 9=303 35=AB 52=20190915-16:32:33 34=17794 56=IBKR 49=compid
11=10003.0 55=IBM 38=154=2 40=2 44=.10 59=0 15=USD 204=0 1=U123456
440=37710902 167=MULTILEG 555=2 600=IBM 609=FUT 608=FXXXXX 610=201911 614=100
616=ONE 564=O 623=1 624=2 600=IBM 609=STK 608=ESXXXX 564=O 623=100 616=NYSE
624=1 100=IBKREFP 10=182
```

Execution Report

The execution report message is used to:
- Confirm the receipt of an order
- Confirm changes to an existing order (i.e. accept cancel and replace requests)
- Relay order status information
- Relay trade reports
- Reject orders
- Report trade busts or restatements

Tag	Field Name	Req'd	Comments
	Standard Header	Y	MsgType = 8
37	OrderID	Y	See notes below for SMART routed combo orders.
11	ClOrdID	N	
17	ExecID	Y	Unique execution identifiers are provided for the following OrdStatus types (tag 39): Partially Filled Filled Acks. Pending Acks. For OrdStatus types this field will contain 0
20	ExecTransType	Y	
19	ExecRefID	N	Provided for Cancel and Correct ExecTransType messages.
39	OrdStatus	Y	Identifies the current status of the order
103	OrdRejReason	N	Default value is: 0 = Broker Option
150	ExecType	Y	Identifies the type of Execution Report
151	Leaves Qty	Y	The amount of shares open for further execution.
63	SettlmntTyp	N	Only Regular type supported.
55	Symbol	Y	
54	Side	Y	
38	OrderQty	Y	
40	OrdType	N	
44	Price	N	
99	StopPx	N	
59	TimeInForce	N	
47	Rule80A	N	
32	LastShares	Y	
31	LastPx	Y	
14	CumQty	Y	
6	AvgPx	Y	
60	TransactTime	N	

Tag	Field Name	Req'd	Comments
58	Text	N	Examples of Error Text Messages: · Duplicate ID · No such order · Unknown contract · Over limit · Invalid exchange · No clearing rule found · Unsupported type · Invalid reference · Invalid modification · Unknown reason · Exchange closed · Communication time-out · Over credit limit
439	ClearingFirm	Y	Included for fill and partial fill.
440	ClearingAccount	N	Extra user-defined conditionally required field for options and futures options. Included for fill and partial fill.
167	SecurityType	N	Default Value: CS.
201	PutOrCall	N	Required for Option orders
202	StrikePrice	N	Required for Option orders
200	MaturityMonthYear	N	Required for Futures and Options
205	MaturityDay	N	Day of month used in conjunction with MaturityMonthYear to specify the maturity date. Required for Futures and Options
207	SecurityExchange	Y*	Delivered for fills and partial fills only - Refer to IBKR Web site for exchange symbols located under the Resources Section http://www.interactivebrokers.com/
100	ExDestination	Y*	Delivered for fills and partial fills only - Execution destination, refer to IBKR Web site symbols located under the Resources Section for various mnemonics: http://www.interactivebrokers.com/
30	LastMkt	Y*	Delivered on fills and partial fills only - Market of execution for last fill.
204	CustomerOrFirm	N	
6013	ComboLegInfo	N	Will be included on execution reports for combo orders
6273	tPipExchanges	N	May be sent on order acks and unsolicited order status messages
	Standard Trailer	Y	

Execution Report Types

Execution report types are defined in FIX via tag 150 ExecType.

New Order Acknowledgement (150=0)

```
8=FIX.4.2 9=0252 35=8 34=004862 43=N 52=20190915-16:32:33 56=client1 49=IBKR
37=0000007c.00003b0f.41073a2a.001 11=10003.0 150=0 20=0 39=0 55=IBM 38=100
54=1 40=2 44=10.10 59=0 15=USD 204=0 47=A 167=CS 10=182
```

Partial Fill (150=1)

```
8=FIX.4.2 9=0252 35=8 34=004862 43=N 52=20190915-16:32:33 56=client1 49=IBKR
37=0000007c.00003b0f.41073a2a.001 11=10003.0 150=1 20=0 39=1 32=200 31=10.2
14=200 151=800 6=10.2 38=1000 55=IBM 38=100 54=1 40=2 44=10.10 59=0 15=USD
```

```
204=0 47=A 167=CS 10=182
```

Full Fill (150=2)

```
8=FIX.4.2 9=0252 35=8 34=004862 43=N 52=20190915-16:32:33 56=client1 49=IBKR
37=0000007c.00003b0f.41073a2a.001 11=10003.0 150=2 20=0 39=2 32=400 31=10.2
14=1000 151=0 6=10.2 38=1000 55=IBM 38=100 54=1 40=2 44=10.10 59=0 15=USD
204=0 47=A 167=CS 10=182
```

Order Cancelled (150=4)

```
8=FIX.4.2 9=0252 35=8 34=004862 43=N 52=20190915-16:32:33 56=client1 49=IBKR
37=0000007c.00003b0f.41073a2a.001 11=10004.0 41=100003.0 150=4 20=0 39=4 32=0
31=0 14=0 151=0 6=0 38=1000 55=IBM 38=100 54=1 40=2 44=10.10 59=0 15=USD
204=0 47=A 167=CS 10=182
```

Order replaced (150=5)

```
8=FIX.4.2 9=0252 35=8 34=004862 43=N 52=20190915-16:32:33 56=client1 49=IBKR
37=0000007c.00003b0f.41073a2a.001 11=10004.0 41=100003.0 150=5 20=0 39=5 32=0
31=0 14=500 151=500 6=0 38=1000 55=IBM 38=100 54=1 40=2 44=10.10 59=0 15=USD
204=0 47=A 167=CS 10=182
```

Pending Cancel (39=6)

```
8=FIX.4.2 9=0241 35=8 34=000043 43=N 52=20190728-17:09:59 49=IBKR
56=client1 37=00000038.00003B17.4107d4fd.001b 11=87236774.0
17=1091032599.665192 150=6 20=0 39=6 55=IBM 54=2 38=10 44=40 32=0 31=0.00
14=0 151=10 1=U123456 6=0 167=STK 204=0 60=20190728-17:09:59 40=2 10=097
```

Rejected (150=8)

```
8=FIX.4.2 9=0321 35=8 34=000104 43=n 52=20190728-18:31:47 49=IBKR
56=client1 37=0 11=20040728-021093276-ZZ0926 17=1091039507.268051 20=0
150=8 103=0 1=U123456 39=8 55=ABCD 54=1 38=300 44=18 32=0 31=0.00 14=0
151=06=0 167=OPT 200=201908 201=0 58=Unknown Contract 10=170
```

Common Reject messages (text seen in FIX tag 58) frequently encountered during initial message testing:

- Invalid BD Flag or Origin. Order capacity is missing. Please include FIX tag 204 (IBKR supports this tag for all security types) or tags 47 or 6122
- Invalid Destination Exchange. FIX tag 100 needs to be populated with valid exchange identifier (ex 100=SMART)
- Unknown Contract. Using the information provided, IBKR cannot match to a known

security in our database
- Ambiguous Contract. There is not enough information for IBKR to identify the symbol uniquely. Often including tag 15 (Currency) and/or tag 207 (SecurityExchange) can fix the issue.
- Invalid or Missing IBKR Cust Acct No. Account value is required. Please include IBKR account number in FIX tag 1 (Account).
- No Clearing Rule Found. Invalid value being sent in tag 439 (ClearingFirm)
- No trading permissions/account requirements – invalid value being sent in tag 439 (ClearingFirm)

Multileg Execution Reports

Depending on customer preferences IBKR can configure the FIX engine to send execution reports for Multileg orders in two different ways:

1. One execution report to acknowledge each order state change (new, modified, canceled, etc.) except for fill report. For Multileg fills, you would receive a combined multileg execution report and individual execution reports for each of the legs.
2. Execution reports are only reported for individual legs (never for the combined multileg order). This includes all types of execution reports (fills, new, modified, canceled, etc.).

Tag 6013 (ComboLegInformation) was created to identify the execution report as being for the combo or one of the legs. With the adoption of the FIX 4.3 standard, tags 442 and 654 were introduced that perform the same function. IBKR currently uses all three tags in the execution reports it sends for combo orders.

The format is as follows:

442 (MultiLegReportingType) = 1 – Single Security (default if not specified)
                            = 2 – Individual leg of a multi-leg security
                            = 3 – Multi-leg security

If tag 442=2, then tag 654 (LegRefID) is included as well. IBKR returns the leg reference ID defined by the customer in Multileg New Order. IBKR currently supports only numeric references.

654 (LegRefID) =10 - is an equivalent for leg reference 10

Tag 6013 combines the same information as in tag 442 and 654. IBKR created it before the adoption of tags 442 and 654. It is still included in the combination execution reports IBKR sends for reverse compatibility. IBKR will eventually stop supporting tag 6013 following FIX standard as close as possible.

IBKR SMART Multileg Orders

SMART routing logic can split a combination order into individual legs and route the legs independently. For that reason, it is possible for partial executions to occur on multiple exchanges for each leg. For example, a 5 x 5 spread can execute with 5 contracts (for one leg) executing on the CBOE, and 2 contracts (for the other leg) executing on the AMEX and the remainder of 3 (for that same leg) executing on the ISE.

Trade Busts and Restatements

Occasionally, previously reported trades may be restated or busted. (see http://www.interactivebrokers.com for IBKR's bust policy and procedures). These messages are delivered though a FIX session using execution reports flagged with an ExecTransType (tag 20) of either 1 (for a bust) or 2 (for a restatement). For trade busts, the remainder of a trade confirm is included with the previously reported executionID and orderID. The values for cumQty, lastSize, lastShares, and AvgPx are adjusted to reflect the removal of that execution. Trade restatements are essentially the same, with the values for last price or size getting changed to a differerent value rather than zero.

Note: If an execution is busted, it does not automatically become a working order again.

Example: Trade Bust

```
8=FIX.4.2 9=0307 35=8 34=008400 43=N 52=20060830-13:42:18 49=IBKR 56=client1
37=0001d43b.000120fe.44f543ed.0001  11=2313691787  17=0001cbb4.42c4c437.01.02
150=2 20=1 19=0001cbb4.42c4c437.01.01 39=2 55=IBM 54=1 38=10 44=3 32=0 30=ISE
31=2.9  14=1  151=0  6=2.9  167=OPT  200=200612  201=1  60=20060830-13:42:18 40=2
202=65 77=O 10=182
```

Example: Trade Restatement

```
8=FIX.4.2 9=0307 35=8 34=008400 43=N 52=20060830-13:42:18 49=IBKR 56=client1
37=0001d43b.000120fe.44f543ed.0001  11=2313691787  17=0001cbb4.42c4c437.01.02
150=1  20=2  19=0001cbb4.42c4c437.01.01  39=2  55=IBM  54=1  38=10  32=1  30=ISE
31=2.95 14=2 151=8 6=2.95 167=OPT 200=200612 201=1 60=20060830-13:42:18 40=1
202=65 77=O 10=182
```

Cancel/Replace Request

The Cancel/Replace Request is used to modify an existing order. Please see the table below for a list of the fields that can and cannot be modified. Required fields that cannot be changed must match the original order. Optional fields that cannot be changed must match the original order if they are included. If optional fields are not included, they are ignored and the modify could be acknowledged if there is no other reason to reject it.

* Any non-required tags sent on the first modification request, must be sent on all subsequent modification requests for that same order.

Tag	Field Name	Req'd	Comments
	Standard Header	Y	MsgType = G
1	Account	Y	
21	HandlInst	Y	
41	OrigClOrdID	Y	
37	OrderID	N	
11	ClOrdID	Y	
63	SettlemntTyp	N	Must match original order
55	Symbol	Y	Must match original order

Tag	Field Name	Req'd	Comments
48	SecurityID	N	Must match original order
22	IDSource	N	Must match original order
54	Side	Y	Must match original order
38	OrderQty	Y	Can be modified
40	OrdType	Y	IBKR only supports changing a Limit order to a Market
44	Price	N	Can be modified
99	StopPx	N	Can be modified only if original order was STP or STP LMT
59	TimeInForce	N	IBKR supports changing Day orders to GTC and back
47	Rule80A	N	Must match original order
58	Text	N	
126	Expire Time	N	Can be changed on Good Til Time orders
432	Expire Date	N	Can be changed on Good Til Date orders
439	CarryFirm	N	Must match original order
440	ClearingAccount	N	Must match original order
6010	OrderReference	N	Can be modified
6037	OptionOrigin	N	Must match original order
6257	NoBarriers	N	Must match original order
6258	BarrierPrice	N	Can be changed
6259	BarrierStopPrice	N	Can be changed
6260	BarriertrailingAmt	N	Can be changed
6261	BarrierPriceDelimter	N	Must match original order
6262	BarrierLimitPrice	N	Can be changed
6269	BarrierTrailingAmtUnit	N	Can be changed
	Standard Trailer	Y	

Example:

```
8=FIX.4.2   9=150   35=G   49=client1   56=IBKR   34=43   52=20040728-17:11:34
11=B8ESP7J1Q0C_2   22=4   55=JPM   54=1   38=300   41=B8ESP7J1W0C_1   44=47.000000
40=2   21=1   100=n   10=231
```

Multileg Cancel/Replace Request

The Multileg Cancel/Replace Request is used to modify an existing multileg (combination) order. Please see the table below for a list of the fields that can and cannot be modified. Required fields that cannot be changed must match the original order. Optional fields that cannot be changed must match the original order if they are included. If optional fields are not included, they are ignored and the modify could be acknowledged if there is no other reason to reject it.

Any non-required tags sent on the first modification request, must be sent on all subsequent modification requests for that same order.

Tag	Field Name	Req'd	Comments
	Standard Header	Y	MsgType = AC
1	Account	Y	
21	HandlInst	Y	
41	OrigClOrdID	Y	
37	OrdID	N	
11	ClOrdID	Y	
63	SettlemntTyp	N	Must match original order
55	Symbol	Y	Must match original order

48	SecurityID	N	Must match original order
22	IDSource	N	Must match original order
54	Side	Y	Must match original order
38	OrderQty	Y	Can be modified
40	OrdType	Y	Must match original order
44	Price	N	Can be modified
99	StopPx	N	Can be modified only if original order was STP or STP LMT
100	ExDestination	N	Must match original order
59	TimeInForce	N	Must match original order GTC Combo orders not supported at this time
47	Rule80A	N	Must match original order
58	Text	N	
439	CarryFirm	N	Must match original order
440	ClearingAccount	N	Must match original order
6010	OrderReference	N	Can be modified
6037	OptionOrigin	N	Must match original order
	Standard Trailer	Y	

Example:

```
8=FIX.4.2  9=303   35=AC   49=client1   56=IBKR   34=43   52=20040728-17:11:34
11=B8ESP7J1Q0C_2   22=4   1=U123456  100=SMART  55=IBM   54=1   38=10   59=0
15=USD  41=B8ESP7J1W0C_1  44=47.000000  40=2  21=1  204=0  207=ISE  10=231
```

Order Cancel Request

The order cancel request is used to transmit a cancel request for a pending order.

Tag	Field Name	Req'd	Comments
	Standard Header	Y	MsgType = F
1	Account	Y	
11	ClOrdID	Y	
41	OrigClOrdID	Y	
55	Symbol	Y	
48	SecurityID	N	
22	IDSource	N	
54	Side	Y	Has to be identical to original side.
38	OrderQty	Y	
58	Text	N	Taken as a comment only.
	Standard Trailer	Y	

Order Cancel Reject

The Order Cancel Reject message is issued when a Cancel Request or Cancel / Replace Request cannot be honored.

Tag	Field Name	Req'd	Comments
	Standard Header	Y	MsgType = 9
37	OrderID	Y	
11	ClOrdID	Y	
41	OrigClOrdID	Y	

Tag	Field Name	Req'd	Comments
102	CxlRejReason	N	Provided
434	CxlRejResponseTo	Y	
58	Text	N	Reject reason (textual description).
	Standard Trailer	Y	

Order Status Request

The order status request message is used to request a status on a pending order or orders. IBKR only uses tag 11 in the request. When a request is made, IBKR responds with an Execution Report message for the requested order. A special value of " * " may be specified to refer to all the open orders of the customer. In response, IBKR sends a sequence of Execution Reports containing status information for all open orders. A message containing " * " in the ClOrdID field will terminate the sequence.

Tag	Field Name	Req'd	Comments
	Standard Header	Y	MsgType = H
11	ClOrdID	Y	This is the only field which is used by IBKR.
	Standard Trailer	Y	

Bulletin Messages

Your session can be configured to receive bulletin messages. Bulletin messages can contain system status and exchange status information.

Tag	Field Name	Req'd	Comments
	Standard Header	Y	MsgType = B
148	Headline	Y	The text of the Bulletin will be contained in this tag
6143	DailyNewID	Y	ID number associated with a particular bulletin
61	Urgency	Y	Urgency of message 0 = Normal 1 = Flash 2 = Background
207	Security Exchange	N	Used if message applies to a specific exchange
	Standard Trailer	Y	

Example:

```
8=FIX.4.2 9=0102 35=B 34=000003 43=N 52=20050504-13:54:48 49=IBKR 56=client1
61=1 148=Important Bulletin Message 6143=42805703 207=ALL 10=096
```

Post-Trade Allocation

Interactive Brokers (IBKR) supports post-trade allocation between clearing brokers via FIX. Allocation requests are communicated by clients through the use of allocation message type (35=J). IBKR responds to allocation requests using allocation acknowledgement message type (35=P).

Allocation request must be submitted after allocated trades are executed, but before the allocation deadline for particular tradable production. Please check with your IBKR contact to determine your allocation deadline for the product you are planning to allocate. Allocation request is typically acknowledged immediately with a received allocation ack (87=2). Please note, that in some cases (e.g. malformed instruction, instruction submitted after deadline, etc.) allocation can be rejected immediately (87=1). Received allocations are processed shortly after the allocation deadline, at which time each allocation is acknowledged again with either accepted (87=0) or rejected (87=1) allocation ack.

Clients are free to cancel or replace allocations they submitted previously, as long as it is done prior to allocation deadline. Post-trade allocated trades that are not instructed upon through allocation messages or through off line means (e.g. file based allocation, IBKR Web-based post-trade allocation tool) are allocated to default clearing broker.

Please also note that all allocations not submitted via FIX will not be acknowledged via FIX.

Allocation

Below table descrIBKRes FIX tags necessary for stock allocations in terms of security definition. Please use appropriate security definition tags for derivatives.

Tag	Field Name		Req'd	Comments
	Standard Header		Y	MsgType = J
70	AllocID		Y	Unique identifier for this allocation message.
71	AllocTransType		Y	Identifies allocation transaction type: 0 = New 1 = Replace 2 = Cancel
72	RefAllocID		Y	Reference identifier to be used with Replace and Cancel AllocTransType messages.
54	Side		Y	1 = Buy 2 = Sell 5 = Short Sell
55	Symbol		Y	
48	SecurityID		N	
22	IDSource		N	
53	Shares		Y	Total number of shares allocated to all clearing brokers.
6	AvgPx		Y	Average trade price for all the allocations (decimal precision to be agreed with IBKR).
15	Currency		Y	
75	TradeDate		Y	
78	NoAllocs		Y	Indicates number of allocation groups to follow. Not required for AllocTransType=Cancel
->	79	AllocAccount	Y	Clearing broker.
->	80	AllocShares	Y	Number of shares/contracts allocated to specified clearing broker.
->	153	AllocAvgPx	Y	Average prices of the allocated shares/contracts.
	Standard Trailer		Y	

Example:

```
8=FIX.4.2 9=0241 35=J 49=client1 56=IBKR 34=1 52=20121128-22:24:20 70=1 71=0
```

```
6=20.0307 15=USD 75=20121128 55=INTC 54=1 53=1400 78=3 79=GSCO 80=280
153=20.0307 79=JPM 80=420 153=20.0307 79=CSFB 80=700 153=20.0307 10=204
```

Allocation Ack

Each allocation is responded to with one or more allocation ack. Allocation ack references corresponding allocation by AllocID (tag 70).

Tag	Field Name	Req'd	Comments
	Standard Header	Y	MsgType = J
70	AllocID	Y	Unique identifier for this allocation message.
75	TradeDate	Y	
87	AllocStatus	Y	Identifies status of allocation. 0 = Accepted (Successfully Processed) 1 = Rejected 3 = Received
88	RejectCode	N	Required for AllocStatus = 1
58	Text	N	Required for AllocStatus = 1
	Standard Trailer	Y	

Example:

```
8=FIX.4.2 9=000163 35=P 34=1 43=N 52=20121128-22:24:20 49=IBKR 56=client1
70=1 75=20121128 87=1 88=7 58=Too late to submit PTA for trade date 20121128
for USSTK 10=239
```

What-If (Preview Order)

Interactive Brokers (IBKR) supports What-If orders. Orders sent with FIX tag 6091=1 will not be sent to market, but will instead show the client the potential affect the order we have if it were routed:

Logic:

To IB:
    WhatIf = 6091,

From IB: (some fields could be optional)
    InitMargin = 6092
    MaintMargin = 6093
    EquityWithLoan = 6094
    InitMarginBefore = 6826
    MaintMarginBefore = 6827
    EquityWithLoanBefore = 6828
    MarginCurrency = 8130
    Commissions = 6378
    MinCommissions = 6379
    MaxCommissions = 6380
    CommissionCurrency = 6381
    MaxOrderSize = 6552
    Text = 58, <---- reject/error message

What-If / Preview Example:

```
8=FIX.4.2 9=0207 35=D 34=000034 52=20170630-12:52:09 11=96014709.0 44=152.79
1=U123456 204=0 38=100 40=2 55=IBM 167=CS 54=1 59=0 100=SMART 6091=1 15=USD
10=096
```

What-If response:

```
8=FIX.4.2 9=0207 35=8 34=000040 52=20170630-12:52:09 11=96014709.0
17=16272.1498827129.0 150=A 20=3 39=A 38=100 44=152.79 32=0 31=0 14=0 151=100
6=0 37=00015c22.00003f90.59564928.0001 1=U123456 204=0 38=100 40=2 55=IBM
167=CS 54=1 59=0 60=20170630-12:52:09 6091=1 6094=6000329.05 6092=21603.94
6093=11571.19 6828=6000329.05 6826=27892.77 6827=7726.94 8130=USD 6379=0.1 6380=0.3 6381=USD
15=USD 10=096
```

Drop Copy Support

Interactive Brokers (IBKR) supports separate read-only "drop copy" session for the purpose of trade reporting or for the purpose of both trade and order reporting. The former is also known as Real-Time Trade Reporting (RTTR), the latter is also known as RTTR Plus.

RTTR sessions can be linked to one or more trading accounts. The drop copy session is a standard FIX session which follows all of the standard session level rules including backfill.

The following application messages would be sent via RTTR:
- Fill
- Partial Fill
- Trade Bust / Adjustment

The following application messages would be sent via RTTR Plus:
- Fill
- Partial Fill
- Trade Bust / Adjustment
- Order ack
- Cancel/replace ack
- Cancel ack
- Reject

Trade reports are delivered real-time as long as a valid drop copy FIX session is established. Trade reports are queued when the drop copy session is not connected.

If you are interested in setting up a drop-copy session, please contact your IBKR Sales Representative or IBKR Client Integration Group.

Appendix A: Notes on IBKR Implementation of FIX 4.3

Although IBKR has implemented many aspects of FIX 4.3, we cannot guarantee full FIX 4.3 compliance at this time. IBKR suggests the use of FIX 4.1 or 4.2 if possible.

Tag 20 (ExecTransType) is no longer used in FIX 4.3. This has been replaced with the following values in tag 150 (ExecType):
- H = Trade Cancel
- G = Trade Correct
- I = Order Status

Tag 150 (Exec Type) the values of 150=1 and 150=2 have been replaced with 150=F

The following order types in tag 40 (OrdType) were replaced with new time in force 59=7 (at the close):
- 40 = 5 (market on close)
- 40 = A (on close)
- 40 = B (limit on close)

Tag 47 (Rule80A): Has been replaced with the combined use of tags 528 (OrderCapacity) and 529 (OrderRestrictions).

Tag 204 (CustomerOrFirm) Has been replace with the use of tag 528 (OrderCapacity).

Tags 439 (ClearingFirm) & 440 (ClearingAccount): Have been replaced with:
- Tag 452 (PartyRole)
- Tag 448 (PartyID)
- Tag 447 (PartyIDSource)
- Tag 523 (PartySubID)

Tag 167 (Security Type): Values "FUT", "OPT", and "FOP" have been replaced with the use of the CFI Code in tag 461 (CFICode)

Appendix B: IBKR Implementation of Standard FIX Tags

Tag #	Tag Name	Data Type	IBKR Implementation	FIX Standard Definition	Used In
1	Account	String	Required for sessions which route orders to multiple IBKR accounts. The intended IBKR account number is used by default, although mapping can be implemented to replace the IBKR account designation with a unique user-specified value.	Account mnemonic as agreed between buy and sell sides, e.g. broker and institution or investor / intermediary and fund manager.	New Order Single New Order Multileg (combo)
6	AvgPx	Float	Per Standard	Calculated average price of all fills on this order.	Execution Report
7	BeginSeqNo	Int	Per Standard	Message sequence number of first message in range to be resent	Resend Request
8	BeginString	String	Per Standard	Identifies beginning of new message and protocol version. ALWAYS FIRST FIELD IN MESSAGE. (Always unencrypted) Valid values: FIX.4.2	Standard Header
9	Body Length	Int	Message length must be 1 to 4 characters long	Message length, in bytes, forward to the CheckSum field. ALWAYS SECOND FIELD IN MESSAGE. (Always unencrypted)	Standard Header
10	Checksum	String	Per Standard	Three byte, simple checksum (See Appendix B of 4.2 manual for description). ALWAYS LAST FIELD IN MESSAGE; i.e. serves, with the trailing <SOH>, as the end-of-message delimiter. Always defined as three characters. (Always unencrypted)	Standard Trailer
11	C1OrdID	String	Per Standard	Unique identifier for Order as assigned by order routing firm. Uniqueness must be guaranteed within a single trading day. Firms which electronically submit multi-day orders should consider embedding a date within the ClOrdID field to assure uniqueness across days.	New Order-Single, Execution Report, Cancel, Cancel Replace, Cancel Reject
14	CumQty	Int	Per Standard	Total number of shares filled. (Prior to FIX 4.2 this field was of type int)	Execution Report
15	Currency	Currency	Valid Values: USD = US Dollar AUD = Australian Dollar CAD = Canadian Dollar CHF = Swiss Franc EUR = Euros GBP = British Pound HKD = Hong Kong $ JPY = Japanese Yen	Identifies currency used for price. Absence of this field is interpreted as the default for the security. It is recommended that systems provide the currency value whenever possible. See Fix 4.2 Manual Appendix A: Valid Currency Codes for information on obtaining valid values.	Execution Report
16	EndSeqNo	Int	EndSeqNo = "0" is currently not supported by IBKR. A specific sequence number must be specified.	Message sequence number of last message in range to be resent. If request is for a single message BeginSeqNo = EndSeqNo. If request is for all messages subsequent to a particular message, EndSeqNo = "0" (representing infinity).	Resend
17	ExecID	String	Per Standard	Unique identifier of execution message as assigned by broker (will be 0 (zero) for ExecTransType=3 (Status)). Uniqueness must be guaranteed within a single trading day or the life of a multi-day order. Firms which accept multi-day orders should consider embedding a date within the ExecID field to assure uniqueness across days. (Prior to FIX 4.1 this field was of type int)	Execution Report

Tag #	Tag Name	Data Type	IBKR Implementation	FIX Standard Definition	Used In
18	ExecInst	Multiple Value String	IBKR Supports the following Values: P = Market Peg R = Primary peg (primary market – buy at bid/sell at offer) M = Midpoint peg G = All or None W = Peg to VWAP a = Trailing Stop Peg (FIX 4.4) s = Peg to stock (IBKR Custom value) e = Used for IBKR Algo orders	Instructions for order handling on exchange trading floor. If more than one instruction is applicable to an order, this field can contain multiple instructions separated by space. Valid values: 1 = Not held 2 = Work 3 = Go along 4 = Over the day 5 = Held 6 = Participate don't initiate 7 = Strict scale 8 = Try to scale 9 = Stay on bidside 0 = Stay on offerside A = No cross (cross is forbidden) B = OK to cross C = Call first D = Percent of volume "(indicates that the sender does not want to be all of the volume on the floor vs. a specific percentage)" E = Do not increase - DNI F = Do not reduce - DNR G = All or none - AON I = Institutions only L = Last peg (last sale) M = Mid-price peg (midprice of inside quote) N = Non-negotiable O = Opening peg P = Market peg R = Primary peg (primary market - buy at bid/sell at offer) S = Suspend T = Fixed Peg to Local best bid or offer at time of order U = Customer Display Instruction (Rule11Ac1-1/4) V = Netting (for Forex) W = Peg to VWAP	New Order-Single
19	ExecRefID	String	Provided for Cancel and Correct ExecTransType messages	Reference identifier used with Cancel and Correct transaction types. (Prior to FIX 4.1 this field was of type int)	Execution Report
20	ExecTransType	Char	Per Standard	Identifies transaction type Valid values: 0 = New 1 = Cancel 2 = Correct 3 = Status	Execution Report
21	HandlInst	Char	The only supported value for IBKR is: 2 = Automated execution order, public, Broker intervention OK.	Instructions for order handling on Broker trading floor Valid values: 1 = Automated execution order, private, no Broker intervention 2 = Automated execution order, public, Broker intervention OK 3 = Manual order, best execution	Order, Cancel, Replace

Tag #	Tag Name	Data Type	IBKR Implementation	FIX Standard Definition	Used In
22	IDSource	String	IBKR supports 1=CUSIP 4=ISIN	Identifies class of alternative SecurityID Valid values: 1 = CUSIP 2 = SEDOL 3 = QUIK 4 = ISIN number 5 = RIC code 6 = ISO Currency Code 7 = ISO Country Code 8 = Exchange Symbol 9 = Consolidated Tape Association (CTA) Symbol (SIAC CTS/CQS line format) 100+ are reserved for private security identifications	Order, Execution Report, Cancel, Replace
30	LastMkt	Exchange	Per Standard	Market of execution for last fill. Valid Values: See Appendix C of Fix 4.2 Manual	Execution Report
31	LastPx	Float	Per Standard	Price of this (last) fill. Field not required for ExecTransType = 3 (Status)	Execution Report
32	LastShares	Qty	Per Standard	Quantity of shares bought/sold on this (last) fill. Field not required for ExecTransType = 3 (Status) (Prior to FIX 4.2 this field was of type int)	Execution Report
34	MsgSeqNum	Int	Per Standard	Integer message sequence number. Default max seq # is 1,000,000. Can be increased to 10,000,000 as needed.	Standard Header

Tag #	Tag Name	Data Type	IBKR Implementation	FIX Standard Definition	Used In

35	MsgType	Int	IBKR Supports the following values:
			
			0 = Heartbeat
			1 = Test Request
			2 = Resend Request
			3 = Reject
			4 = Sequence Reset
			5 = Logout
			8 = Execution Report
			9 = Order Cancel Reject
			A = Logon
			B = News/Bulletin Message
			D = Order Single
			F = Order Cancel Request
			G = Order Cancel/ Replace Req
			H = Order Status Request
			J = Allocation
			P = Allocation Ack
			AB = New Order-
			    Multileg
			AC = Cancel Replace –
			    Multileg
				Defines message type. ALWAYS THIRD FIELD IN MESSAGE. (Always unencrypted)
				Note: A "U" as the first character in the MsgType field (i.e. U1, U2, etc) indicates that the message format is privately defined between the sender and receiver.
				Valid values: *** Note the use of lower case letters ***
				0 = Heartbeat
				1 = Test Request
				2 = Resend Request
				3 = Reject
				4 = Sequence Reset
				5 = Logout
				6 = Indication of Interest
				7 = Advertisement
				8 = Execution Report
				9 = Order Cancel Reject
				A = Logon
				B = News
				C = Email
				D = Order – Single
				E = Order – List
				F = Order Cancel Request
				G = Order Cancel/Replace Request
				H = Order Status Request
				J = Allocation
				K = List Cancel Request
				L = List Execute
				M = List Status Request
				N = List Status
				P = Allocation Ack
				Q = Don't Know Trade (DK)
				R = Quote Request
				S = Quote
				T = Settlement Instructions
				V = Market Data Request
				W = Market Data-Snapshot/Full Refresh
				X = Market Data-Incremental Refresh
				Y = Market Data Request Reject
				Z = Quote Cancel
				a = Quote Status Request
				b = Quote Acknowledgement
				c = Security Definition Request
				d = Security Definition
				e = Security Status Request
				f = Security Status
				g = Trading Session Status Request
				h = Trading Session Status
				i = Mass Quote
				j = Business Message Reject
				k = Bid Request
				l = Bid Response (lowercase L)
				m = List Strike Price
					Standard Header

36	NewSeqNo	Int	Per Standard	New sequence number	Sequence Reset
37	OrderID	String	Per Standard	Unique identifier for Order as assigned by broker. Uniqueness must be guaranteed within a single trading day. Firms which accept multi-day orders should consider embedding a date within the OrderID field to assure uniqueness across days.	Execution Report, Cancel/Replace Request, Order Cancel Reject
38	OrderQty	Qty	Per Standard	Number of shares ordered	New Order-Single, Execution Report, Cancel, Cancel Replace

Tag #	Tag Name	Data Type	IBKR Implementation	FIX Standard Definition	Used In
39	OrdStatus	Char	IBKR Supports the following values: 0 = New 1 = Partially filled 2 = Filled 4 = Canceled 5 = Replaced 6 = Pending Cancel 8 = Rejected A = Pending New C = Expired E = Pending Replace (Returned if tag 8 =FIX.4.3)	Identifies current status of order. Valid values: 0 = New 1 = Partially filled 2 = Filled 3 = Done for day 4 = Canceled 5 = Replaced 6 = Pending Cancel (e.g. result of Order Cancel Request) 7 = Stopped 8 = Rejected 9 = Suspended A = Pending New B = Calculated C = Expired D = Accepted for bidding E = Pending Replace (e.g. result of Order Cancel/Replace Request)	Execution Report
40	OrdType	Char	IBKR Supports the following values: 1 = Market 2 = Limit 3 = Stop 4 = Stop limit 5 = Market on close B = Limit on close J = Market If Touched LT = Limit if touched P = Pegged (requires execInst = L, R, M, P or O) TSL = Trailing Stop Limit	Order type. Valid values: 1 = Market 2 = Limit 3 = Stop 4 = Stop limit 5 = Market on close 6 = With or without 7 = Limit or better 8 = Limit with or without 9 = On basis A = On close B = Limit on close C =Forex - Market D = Previously quoted E = Previously indicated F = Forex - Limit G = Forex - Swap H = Forex - Previously Quoted I = Funari (Limit Day Order with unexecuted portion handled as Market On Close, e.g. Japan) P = Pegged (requires ExecInst = L, R,M,P or O)	New Order-Single, Execution Report, Cancel/Replace Request
41	OrgClOrdID	String	Per Standard	ClOrdID of the previous order (NOT the initial order of the day) as assigned by the institution, used to identify the previous order in cancel and cancel/replace requests.	Cancel/replace Request, Order Cancel Request, Order Cancel Reject
43	PossDupFlag	Boolean	Per Standard	Indicates possible retransmission of message with this sequence number	Standard Header
44	Price	Price	Per Standard	Price per share. Should not be present for market orders.	New Order-Single, Execution Reports, Cancel/Replace Request
45	RefSeqNo	Int	Per Standard	Reference message sequence number. MsgSeqNum of rejected message	Reject

Tag #	Tag Name	Data Type	IBKR Implementation	FIX Standard Definition	Used In
47	Rule80A (OrderCapacity)	Char	IBKR Supports the following Values: A = Agency single order J = Program Order, index arb, for individual customer K = Program Order, non-index arb, for individual customer I = Individual Investor, single order P = Principal U = Program Order, index arb for other agency Y = Program Order, non-index arb, for other agency M = Program Order, index arb for other member N = Program Order, non-index arb for other member W = All other orders as agent for other member Default value is A ** If tag9 = FIX.4.3 then tags 528 and 529 should be used in place of tag 47	Note that the name of this field is changing to "OrderCapacity" as Rule80A is a very US market-specific term. Other world markets need to convey similar information, however, often a subset of the US values. See the "Rule80A (aka OrderCapacity) Usage by Market" appendix for market-specific usage of this field. Valid values: A = Agency single order B = Short exempt transaction (refer to A type) C = Program Order, non-index arb, for Member firm/org D = Program Order, index arb, for Member firm/org E = Registered Equity Market Maker trades F = Short exempt transaction (refer to W type) H = Short exempt transaction (refer to I type) I = Individual Investor, single order J = Program Order, index arb, for individual customer K = Program Order, non-index arb, for individual customer L = Short exempt transaction for member competing market-maker affiliated with the firm clearing the trade (refer to P and O types) M = Program Order, index arb, for other member N = Program Order, non-index arb, for other member O = Competing dealer trades P = Principal R = Competing dealer trades S = Specialist trades T = Competing dealer trades U = Program Order, index arb, for other agency W = All other orders as agent for other member X = Short exempt transaction for member competing market-maker not affiliated with the firm clearing the trade (refer to W and T types) Y = Program Order, non-index arb, for other agency Z = Short exempt transaction for non-member competing market-maker (refer to A and R types)	New Order Single, Execution Reports, Cancel/Replace Request
48	SecurityID	String	Only CUSIP or ISIN are supported.	Security identifier	New Order Single, Execution Reports, Cancel/Replace Request, Order Cancel Request
49	SenderCompID	String	Per Standard	Assigned value used to identify firm sending message.	Standard Header
50	SenderSubID	String	Per Standard	Assigned value used to identify specific message originator (desk, trader, etc.)	Standard Header
52	SendingTime	UTC Time Stamp	Per Standard	Time of message transmission (always expressed in UTC (Universal Time Coordinated, also known as "GMT")	Standard Header

Tag #	Tag Name	Data Type	IBKR Implementation	FIX Standard Definition	Used In

54	Side	Char	IBKR supports the following values:
			
			1 = Buy
			2 = Sell
			3 = BuyMinus (interpreted as buy)
			4 = SellPlus (interpreted as sell)
			5 = Sell Short
			6 = Sell Short Exempt
				Side of order
				Valid values:
				  1 = Buy
				  2 = Sell
				  3 = Buy minus
				  4 = Sell plus
				  5 = Sell short
				  6 = Sell short exempt
				  7 = Undisclosed (valid for IOI and List Order messages only)
				  8 = Cross (orders where counterparty is an exchange, valid for all messages except IOIs)
				  9 = Cross short
					New Order-Single, Execution Report, Cancel/Replace Request, Order Cancel Request

55	Symbol	String	For Options, underlying symbol should be used as a default. If you wish to use the trading class symbol, your session needs to be configured to do so. Please contact IBKR's FIX integration department.	Ticker Symbol	New Order-Single, Execution Report, Cancel/Replace Request, Order Cancel Request
56	TargetCompID	String	Default is "IB" If required the value can be determined by the client, please notify FIX Integration Group.	Assigned value used to identify receiving firm	Standard Header
57	TargetSubID	String	Per Standard	Assigned value used to identify specific individual or unit intended to receive message. "ADMIN" reserved for administrative messages not intended for a specific user.	Standard Header
58	Text	String	Not supported on orders to IBKR. On execution reports, text returned from IBKR depends on the message type. See the various tables in the Application Messages documentation section	Free format text string (Note: this field does not have a specified maximum length)	Reject, Sequence Reset, New Order-Single, Execution Report, order Cancel Request, Order Cancel Reject
59	TimeInForce	Char	If specified, the valid values are 0 = Day 1 = GTC 2 = OPG 3 = IOC 4 = Fill or Kill (FOK) 6 = GTD (If used, EITHER tag 432 or tag 126 can be used. NOT both.) 7 = At the Closing 8 = Auction	Specifies how long the order remains in effect. Absence of this field is interpreted as DAY. Valid values: 0 = Day 1 = Good Till Cancel (GTC) 2 = At the Opening (OPG) 3 = Immediate or Cancel (OC) 4 = Fill or Kill (FOK) 5 = Good Till Crossing (GTX) 6 = Good Till Date 7 = At the Closing 8 = Auction (AUC)	New Order-Single, Execution Report, Cancel/Replace Request
60	TransactTime	UTC Time Stamp	Per Standard	Time of execution/order creation (expressed in UTC (Universal Time Coordinated, also known as "GMT")	Execution Reports,
61	Urgency	Char	Used in bulletin messages.	Urgency of message 0 = Normal 1 = Flash 2 = Background	Bulletins

Tag #	Tag Name	Data Type	IBKR Implementation	FIX Standard Definition	Used In
63	SettlmntTyp	Char	IBKR supports the following value only: 0 = Regular	Indicates order settlement period. Absence of this field is interpreted as Regular. Regular is defined as the default settlement period for the particular security on the exchange of execution. Valid values: 0 = Regular 1 = Cash 2 = Next Day 3 = T+2 4 = T+3 5 = T+4 6 = Future 7 = When Issued 8 = Sellers Option 9 = T+ 5	Execution Reports, Cancel/Replace Request
64	SettleDate	Local Mkt Date	Date of trade settlement in YYYYMMDD format, expressed in time zone of exchange where the trade is executed (e.g. EST for FX exchanges)	Specific date of trade settlement (Settlement Date) in YYYYMMDD format, expressed in local time at place of settlement.	Execution Reports (FX trade reports only)
65	SymbolSfx	Char	Per Standard	Included with tag 55 to identify preferred symbols	New Order
70	AllocID	Char	Per standard	Unique identifier for allocation message.	Allocation Ack
75	TradeDate	Date	Per standard	Indicates date of trade referenced in this message in YYYYMMDD format. Absence of this field indicates current day (expressed in local time at place of trade).	Allocation Ack
77	OpenClose renamed PositionEffect (FIX 4.3 +)	Char	Valid Values: O=Open C=Close	Indicates whether the resulting position after a trade should be an opening position or closing position. Used for omnIBKRus accounting - where accounts are held on a gross basis instead of being netted together. Valid Values: O = Open C = Close R = Rolled (FIX 4.3)	New Order-Single
78	NoAllocs	Int	Number of repeating groups in pre-trade or post-trade allocation.	Number of repeating groups in allocation.	New Order-Single, Allocation
79	AllocAccount	Char	Clearing broker for post-trade Allocation messages. IBKR Account ID for pre-trade allocation order.	Allocation account.	New Order-Single, Allocation
80	AllocShares	Int	Number of shares/contracts to be allocated.	Allocation shares.	New Order-Single, Allocation
87	AllocStatus	Int	Identifies status of allocation. 0 = Accepted (Successfully Processed) 1 = Rejected 3 = Received	Identifies status of allocation. 0 = Accepted (Successfully Processed) 1 = Rejected 2 = Partial Accept. 3 = Received	Allocation Ack
88	AllocRejCode	Int	Per standard	Identifies reason for rejection. 0 = unknown account(s) 1 = incorrect quantity 2 = incorrect average price 3 = unknown executing broker mnemonic 4 = commission difference 5 = unknown OrderID 6 = unknown ListID 7 = other	Allocation Ack
97	PossResend	Boolean	Per Standard	Indicates that message may contain information that has been sent under another sequence number. Y = Possible resend N = Original transmission	Standard Header

Tag #	Tag Name	Data Type	IBKR Implementation	FIX Standard Definition	Used In
98	EncryptMethod	Int	IBKR does not currently support encryption. Valid value = 0	Method of encryption. Valid values: 0 = None / other 1 = PKCS (proprietary) 2 = DES (ECB mode) 3 = PKCS/DES (proprietary) 4 = PGP/DES (defunct) 5 = PGP/DES-MD5 (see app note on FIX web site) 6 = PEM/DES-MD5 (see app note on FIX web site)	Logon
99	StopPx	Price	Price per share. Valid Values: 0 - 99999999.9999 (number of decimal places may vary and not limited to four). Specify the trailing amount in the StopPx field when creating a Trailing Stop order.	Price per share	New Order-Single, Execution Report, Cancel/Replace Request
100	ExDestination	Exchange	If "SMART" is used, either tag 207 or tag 15 must be used as well. For options, IBKR uses underlying symbol	Execution destination as defined by institution when order is entered. See Appendix C of Fix 4.2 Manual	New Order-Single, Execution Report,
102	CxlRejReason	Int	Per Standard	Code to identify reason for cancel rejection. Valid values: 0 = Too late to cancel 1 = Unknown order 2 = Broker Option 3 = Order already in Pending Cancel or Pending Replace status	Order Cancel Reject
103	OrdRejReason	Int	Supported Values: 0 = Broker Option (default if omitted) 3 = Order exceeds limit	Code to identify reason for order rejection. Valid values: 0 = Broker option 1 = Unknown symbol 2 = Exchange closed 3 = Order exceeds limit 4 = Too late to enter 5 = Unknown Order 6 = Duplicate Order (e.g. dupe ClOrdID) 7 = Duplicate of a verbally communicated order 8 = Stale Order	Execution Reports
108	HeartBtInt	Int	A heartbeat interval of 30 seconds is suggested. The initiator may set it to any value, but the acceptor (IBKR) may override this interval when necessary. That means that the initiator has to be prepared to receive and respond to Test Request and Heartbeat messages in any case.	Heartbeat interval (seconds)	Logon
110	MinQty	Qty	Per Standard	Minimum quantity of an order to be executed	New Order Single
111	MaxFloor	Qty	Per Standard	Maximum number of shares within an order to be shown on the exchange floor at any given time. (Prior to FIX 4.2 this field was of type int)	New Order-Single
112	TestReqID	String	A timestamp string is suggested for TestReqID	Identifier included in Test Request message to be returned in resulting Heartbeat	Test Request

Tag #	Tag Name	Data Type	IBKR Implementation	FIX Standard Definition	Used In
114	LocateReqd	Boolean	Valid codes = N or Y. Required for short sale orders involving U.S. equity securities ("stocks"). If customer uses IBKR as its executing broker but uses a clearing broker other than IBKR (a "Non-Cleared Customer") and Tag 6086 contains the value "1" or "2", this Tag 114 must contain the value "N". IBKR will not accept a short sale order if a Non-Cleared Customer enters the value Y in Tag 114. If customer uses IBKR as its executing broker and clearing broker (a "Cleared Customer"), then such Cleared Customer is not required to populate this field.	Indicates whether the broker is to locate the stock in conjunction with a short sale order. Valid Values: Y = Indicates the broker is responsible for locating the stock. N = Indicates the broker is not required to locate.	New Order - Single
115	OnBehalfOfCompID	String	Per Standard	Assigned values used to identify firm originating message, when message is delivered by a 3rd party provider	New Order-Single
116	OnBehalfofSubID	String	Per Standard	Assigned value used to identify message originator (i.e. trader), for messages delivered by a 3rd party	New Order-Single
122	OrigSendingTime	UTC Time Stamp	Per Standard	Original time of message transmission (always expressed in UTC (Universal Time Coordinated, also known as "GMT") when transmitting orders as the result of a resend request.	Message Header
123	GapFillFlag	Boolean	Per Standard	Indicates that the Sequence Reset message is replacing administrative or application messages which will not be resent. Valid values: Y = Gap Fill message, MsgSeqNum field valid N = Sequence Reset, ignore MsgSeqNum	Sequence Reset
126	ExpireTime	UTCTimeStamp	Specify the date and time in the format below: yyyymmdd-hh:mm:ss	Time/Date of order expiration (always expressed in UTC (Universal Time Coordinated, also known as "GMT")	New Order-Single
141	ResetSeqNumFlag	Boolean	This field is required when a new session is to be opened, if the client is managing seq # resets.	Indicates that the both sides of the FIX session should reset sequence numbers. Valid values: Y = Yes, reset sequence numbers N = No	Logon
148	Headline	Text	Used in bulletin messages, 35=B	The headline of a news message	Bulletin

Tag #	Tag Name	Data Type	IBKR Implementation	FIX Standard Definition	Used In

150	ExecType	Char	IBKR supports the following values:
			
			0 = New
			1 = Partial Fill
			2 = Fill
			4 = Canceled
			5 = Replace
			6 = Pending
			  Cancel/Replace
			A = Pending New
			8 = Rejected
			C = Expired
			D = Restated
			E = Pending Replace
				DescrIBKRes the specific ExecutionRpt (i.e. Pending Cancel) while OrdStatus will always identify the current order status (i.e. Partially Filled)
				Valid values:
				  0 = New
				  1 = Partial fill
				  2 = Fill
				  3 = Done for day
				  4 = Canceled
				  5 = Replace
				  6 = Pending Cancel (e.g. result of Order Cancel Request)
				  7 = Stopped
				  8 = Rejected
				  9 = Suspended
				  A = Pending New
				  B = Calculated
				  C = Expired
				  D = Restated (ExecutionRpt sent unsolicited by sellside, with ExecRestatementReason set)
				  E = Pending Replace (e.g. result of Order Cancel/Replace Request)
					Execution Reports

151	LeavesQty	Qty	Per Standard	Amount of shares open for further execution. If the OrdStatus is Canceled, DoneForTheDay, Expired, Calculated, or Rejected (in which case the order is no longer active) then LeavesQty could be 0, otherwise LeavesQty = OrderQty - CumQty. (Prior to FIX 4.2 this field was of type int)	Execution Reports
152	CashOrderQty	Qty	Per Standard	Specify "monetary quantity" for the order.	New Order Single
153	AllocAvgPx	Price	AvgPx of the post-trade allocated shares for given AllocAccount	Average price for specific AllocAccount	Allocation

Tag #	Tag Name	Data Type	IBKR Implementation	FIX Standard Definition	Used In

167	SecurityType	String	CS = Common stock, can also be sent as STK.
			FUT = Future
			OPT = Option, except for options on futures.
			FOP = Options on Futures
			WAR = Warrant
			MLEG = Multi-leg component, can also be sent as MULTILEG.
			CASH = Foreign exchange.
			BOND = Bonds
			CFD = Contract for difference
			CMDTY = Spot
			FUND = Mutual fund
				Indicates type of security (ISITC spec)
				Valid values:
				   BA = Bankers Acceptance
				   CB = ConvertIBKRle Bond (Note not part of ISITC spec)
				   CD = Certificate Of Deposit
				   CMO = Collateralize Mortgage Obligation
				   CORP = Corporate Bond
				   CP = Commercial Paper
				   CPP = Corporate Private Placement
				   CS = Common Stock
				   FHA = Federal Housing Authority
				   FHL = Federal Home Loan
				   FN = Federal National Mortgage Association
				   FOR = Foreign Exchange Contract
				   FUT = Future
				   GN = Government National Mortgage Association
				   GOVT = Treasuries + Agency Debenture
				   IET Mortgage IOETTE
				   MF = Mutual Fund
				   MIO = Mortgage Interest Only
				   MPO = Mortgage Principal Only
				   MPP = Mortgage Private Placement
				   MPT = Miscellaneous Pass-Thru
				   MUNI = Municipal Bond
				   NONE = No ISITC Security Type
				   OPT = Option
				   PS = Preferred Stock
				   RP = Repurchase Agreement
				   RVRP = Reverse Repurchase Agreement
				   SL = Student Loan Marketing Association
				   TD = Time Deposit
				   USTB = US Treasury Bill
				   WAR = Warrant
				   ZOO = Cats, Tigers & Lions (a real code Treasury Receipts)
					New Order-Single, Execution Reports

168	EffectiveTime	UTCTimeStamp	To be entered in the format: yyyymmdd-hh:mm:ss	Time the details within the message should take effect (always expressed in UTC (Universal Time Coordinated, also known as "GMT")	New Order-Single
200	MaturityMonthYear	month-year	Per Standard	Month and Year of the maturity for SecurityType=FUT or SecurityType=OPT Format: YYYYMM (i.e. 199903)	
201	PutOrCall	Int	Per Standard	Indicates whether an Option is for a put or call Valid values: 0 = Put 1 = Call	New Order-Single, Execution Report
202	Strike Price	Price	Per Standard	The strike price for an option	
204	CustomerOrFirm	Int	Required for Orders Valid Values: 0 = Customer 1 = Firm	Order Capacity indicator specifies if the order capacity is customer or firm. Alternatively, use FIX tag 6122 or 47 to provide this information. If at least one of these tags is not included, order will be rejected.	
205	MaturityDay	Day-of-month	Per Standard. Could be zero padded (e.g. 5th of the month can be represented as both 5 and 05).	Day of month used in conjunction with MaturityMonthYear (tag 200) to specify Maturity Date for OPT or FUT Valid Values: 1-31	
207	SecurityExchange	Exchange	If "SMART" is selected in tag 100, tag 207 can be used to specify the primary exchange of the product	Market used to help identify a security. Valid Values: See Fix 4.2 manual Appendix C:	New Order-Single, Execution Report,
211	PegDifference	PriceOffset	Per Standard	Amount (signed) added to the price of the peg for a pegged order	

Tag #	Tag Name	Data Type	IBKR Implementation	FIX Standard Definition	Used In
231	ContractMultiplier	Float	This tag should be used to identify option contracts if the underlying symbol is used in tag 55	Specifies the ratio or multiply factor to convert from contracts to shares (e.g. 1.0, 100, 1000, etc). Applicable For Fixed Income, ConvertIBKRle Bonds, Derivatives, etc. Note: If used, quantities should be expressed in the "nominal" (e.g. contracts vs. shares) amount.	
378	ExecRestatementReason	Char	IBKR Currently supports: 5=Partial decline of Order Qty (exchange initiated partial cancel) 99 = Other (borrowed from FIX 4.4)	Code to identify reason for and Execution Rpt Message sent with Exec Type = Restated or used when communicating an unsolicited cancel	
388	DiscretionInst	Char	IBKR Currently supports: 0 = Related to displayed price	Code to identify the price a DiscretionOffset is related to and should be mathematically added to. Valid Values: 0 = Related to display price 1 = Related to market price 2 = Related to primary price 3 = Related to local primary price 4 = Related to midpoint price 5 = Related to last trade price	
389	DiscretionOffset	PriceOffset	Per Standard	Amount (signed) added to the "related to" price specified via DiscretionInst.	
432	ExpireDate	Local Mkt Date	Per Standard	Date of order expiration (last day the order can trade), always expressed in terms of the local market date. The time at which the order expires is determined by the local market's business practices	
434	CxlRejResponseTo	Int	Per Standard	Identifies the type of request that a cancel replace request is in response to. Valid Values: 1 = Order Cancel Request 2 = Order Cancel/Replace Request	Cancel Reject
439	Clearing Firm	String	Clearing Firm Identifier. Tag#439 is used to specify the Settling firm the customer wants to use. Used when an execution only (non-cleared client has multiple clear away or CMTA firms permissioned on their account.	Firm that will clear the trade. Used if different than the executing firm.	New Order, Execution Report
440	ClearingAccount	String	Extra user-defined required field for Non-IBKR Clearing FIX Accounts when placing futures and futures options orders.	Supplemental accounting information forwarded to clearing house/ firm	New Order, Execution Report
442	MultilegReportingType	Char	IBKR Uses this tag in addition to the custom tag 6013 for Combo order execution reports. If 442=2 then tag 654 will be included as well	Used to indicate what an Execution Report represents (e.g. used with multi-leg securities, such as option strategies, spreads, etc.). Valid Values: 1 = Single Security (default if not specified) 2 = Individual leg of a multi-leg security 3 = Multi-leg security	Execution Report
461	CFICode	String	Per Standard	Indicates the type of security using ISO 10962 standard, Classification of Financial Instruments (CFI code) values. ISO 10962 is maintained by ANNA (Association of National Numbering Agencies) acting as Registration Authority.	

Tag #	Tag Name	Data Type	IBKR Implementation	FIX Standard Definition	Used In
528	OrderCapacity	Char	Valid Values: A = Agency P = Principal	Designates the capacity of the Firm placing the order. Valid values: A=Agency G=Proprietary I=Individual P=Principal R=Riskless Principal W=Agent for another member (as of FIX 4.3, this field replaced Rule80A (tag 47) --used in conjunction with OrderRestrictions (529) field)	New Order
529	Order Restrictions	MultipleValueString	Valid Values: 1 = Program Trade 2 = Index Arbitrage 3 =Non-Index Arb. 4 = Competing Market Maker 5 = Actjng as Market Maker of Specialist in the underlying security of a derivative security	Restrictions associated with an order. If more than one restriction is applicable to an order, this field can contain multiple instructions separated by space Valid values: 1 = Program Trade 2 = Index Arbitrage 3 = Non-Index Arbitrage 4 = Competing Market Maker 5 = Acting as Market Maker or Specialist in the security 6 = Acting as Market Maker or Specialist in the underlying security of a derivative security 7 = Foreign Entity (of foreign governmnet or regulatory jurisdiction) 8 = External Market Participant 9 = External Inter-connected Market Linkage A = Riskless Arbitrage	New Order
541	MaturityDate	Date	Format: yyyymmdd ** Date should reflect the last trading day of the contract. (typically the Friday before expiration Saturday)	Used in place of tag 200 to identify option contracts that may be ambiguous due to listing of weekly and quarterly options within that same month and strike.	New Order (opt/fut/war)
555	NoLegs	NumInGroup	Per Standard	Number of InstrumentLeg repeating group instances.	New Order-Multileg
564	LegPositionEffect	Char	Per Standard	PositionEffect for leg of a multileg See PositionEffect (77) field for description	New Order-Multileg
583	C1OrdLinkID	String	Used for OCA orders. Must contain the string IBKROCAGROUP Followed with a name for that OCA group Example: IBKROCAGROUP group1	Permits order originators to tie together groups of orders in which trades resulting from orders are associated for a specific purpose, for example the calculation of average execution price for a customer or to associate lists submitted to a broker as waves of a larger program trade	New Order - Single
600	LegSymbol	String	Per Standard	Multileg instrument's individual security's Symbol. See Symbol (55) field for description	New Order-Multileg
608	LegCFICode	String	Per Standard	Multileg instrument's individual security's CFICode. See CFICode (461) field for description	New Order-Multileg
609	LegSecurityType	String	Per Standard	Multileg instrument's individual security's SecurityType. See SecurityType (167) field for description	New Order Multileg

Tag #	Tag Name	Data Type	IBKR Implementation	FIX Standard Definition	Used In
610	LegMaturityMonthYear	month-year	Per Standard	Multileg instrument's individual security's MaturityMonthYear. See MaturityMonthYear (200) field for description	New Order-Multileg
611	LegMaturityDate	Date	Per Standard	Identifies Multileg instrument's individual security's Maturity date in yyyymmdd format.	New Order-Multileg
612	LegStrikePrice	Price	Per Standard	Multileg instrument's individual security's StrikePrice. See StrikePrice (202) field for description	New Order-Multileg
614	LegContractMultiplier	Float	Per Standard	Multileg instrument's individual security's ContractMultiplier. See ContractMultiplier (231) field for description	New Order-Multileg
616	LegSecurityExchange	Exchange	Per Standard	Multileg instrument's security exchange designation used for product identification	
623	LegRatioQty	Float	Per Standard	The ratio of quantity for this individual leg relative to the entire multileg security	New Order-Multileg
624	LegSide	Char	Per Standard	The side of this individual leg (multileg security). cr See Side (54) field for description	New Order-Multileg
636	WorkingIndicator	Boolean	Per Standard	Indicates if the order is currently being worked. Applicable only for OrdStatus = "New". For open outcry markets this indicates that the order is being worked in the crowd. For electronic markets it indicates that the order has transitioned from a contingent order to a market order. Valid values: Y = Order is currently being worked N = Order has been accepted but not yet in a working state	Execution Reports
654	LegRefID	String	Used to identify the leg of a combination order reported on an execution report. Valid Values 1 = Leg 1 2 = Leg 2 3 = Leg 3 4 = …. Etc.	Unique identifier for a specific leg. (combo orders)	Execution Reports
847	TargetStrategyname	String	Used for IBKR Algo Orders Valid Values: • ArrivalPx • PctVol • Vwap • BalanceImpactRisk • MinImpact	Note: standard FIX implementation requires the value to be numerical with values 1000+ reserved and available for bi-lateral agreed upon user defined values.	New Order (IBKR Algos)
849	ParticipationRate	Percent	Used for IBKR Algo Order Percentage in decimal form.	Volume limit (i.e. do not be more than this percent of market value)	New Order (IBKR Algos)
851	Last LiquidityInd	String	Is used to indicate whether liquidity was added (1), removed (2), or if liquidity was routed out (3	Can be enabled for IBKR FIX clients, per request	Execution Reports

Tag #	Tag Name	Data Type	IBKR Implementation	FIX Standard Definition	Used In
1688	ShortSaleExemptionReason	Int	Per Standard, except where noted. Valid Values: 0 = Exemption Reason Unknown 1 = Incoming Short Sale Exempt 3 = Delayed Delivery 4 = Odd-Lot** 5 = Domestic Arbitrage 6 = International Arbitrage 7 = Underwriter or Syndicate DistrIBKRution 8 = Riskless Principal*** 9 = VWAP*** ** Only allowed for odd lot size orders. *** Only supported for done away orders	Indicates the reason a short sale order is exempted from applicable regulation (e.g. Reg SHO addendum (b)(1) in the U.S.). Valid Values: 0 = Exemption Reason Unknown 1 = Incoming Short Sale Exempt 2 = Above NBB (B/D Provision) 3 = Delayed Delivery 4 = Odd-Lot 5 = Domestic Arbitrage 6 = International Arbitrage 7 = Underwriter or Syndicate DistrIBKRution 8 = Riskless Principal 9 = VWAP	New Order (Short Sale Exempt)
1689	LegShortSaleExemptionReason	Int	Per Standard Valid Values: use the same values as ShortSaleExemptionReason.	Indicates the reason a short sale order is exempted from applicable regulation (e.g. Reg SHO addendum (b)(1) in the U.S.). Valid Values: use the same values as ShortSaleExemptionReason.	New Order – Multileg (Short Sale Exempt Leg)

Appendix C: Custom IBKR Tags

Tag #	Tag Name	Data Type	IBKR Implementation	Used In
5700	LocateBroker	String	Tag 5700 is required for short sale orders involving U.S. stocks to indicate the present location of the shares that are to be delivered in connection with customer's short sale order. Customers who use IBKR as their executing broker only, must enter a valid Market Participant Identifier ("MPID") for the clearing broker or other custodian with whom the customer has arranged to borrow the shares that are to be delivered in connection with customer's short sale order. A list of MPID's is located at: http://www.interactivebrokers.com/MPIDlist. If you do not see a valid MPID for your clearing broker or custodian, you must send an e-mail to: proserve@interactivebrokers.com. (Note: This field will be automatically populated with the MPID "IBKRKR" for those customers who use IBKR as both their executing broker and clearing broker). *If more then one MPID needs to be included, you can list more then one using a comma (,) as a delimiter.	New Order
5957	NoStrategyParameters	Integer	Used for IBKR Algo Orders	New Order (IBKR Algos)
5958	StrategyParameterName	String	Used for IBKR Algo Orders Valid Values: riskAversion pctVol forceCompletion	New Order (IBKR Algos)
5960	StrategyParameterValue	String	Used for IBKR Algo Orders Valid Values: Aggressive Passive Neutral Get Done	New Order (IBKR Algos)
6004	Exchange	String		Execution Report
6008	ContractID	String		New Order
6009	ConQPath	String	Contains contract definition data. Not delivered in most FIX sessions	Execution Report
6010	Order Reference Account	String	Extra user-defined field for additional identification for customer orders.	New Order-Single
6013	ComboLegInformation	Multiple Value String (colon : delimited)	Defines the leg of a combination order in an execution report. The format is two columns separated by a colon (:) The first column represents the leg number for the execution report. -1 represents the spread itself. 0 represents the fist leg, 1 represents the second leg, etc. The second column represents the total number of legs. For example, an execution report for the second leg or a two leg spread would have the following value. 1:2 The execution report for the spread itself on a two leg spread would be. -1:2	Execution Report

Tag #	Tag Name	Data Type	IBKR Implementation	Used In
6035	IBKRLocalSymbol	String	For US Equity Options, the OCC 21-character OSI symbol is used. Format: Option root [6 char] Yr (2 char) Mo [2 char] Day [2 char] c/p [1 char] dollar strike [5 char] decimal strike [3 char] Example: MSFT 200117C00140000 I	New Order-Single
6058	TradingClass	String	Used for product identification for Options only. This represents the option "class" Example: The underlying symbol for Microsoft is "MSFT" The option class symbol for Microsoft is "MSQ"	New Order-Single
6075	IssueDate			
6076	BDSymbol			
6077	BDFlag			
6086	ShortSaleRule	Int	The valid values are either "1" or "2". The value "1" may only be used by an IBKR customer who uses IBKR as its executing broker only and does not use IBKR as its clearing broker (a "Non-Clearing Customer"). The value "1" may only be used by a Non-Clearing Customer who has arranged with its clearing broker or custody agent (as designated in Tag 439 on the order) to borrow the shares that are required to be delivered in connection with the short sale order. The value "2" may only be used by a Non-Clearing Customer who has arranged with a clearing broker or custody agent other than its usual clearing broker or custody agent to borrow the shares that are required to be delivered in connection with the short sale order, i.e. a party other than the clearing firm designated in Tag 439 on the order. If a Non-Clearing customer uses the value "2" for this Tag 6086, the Non-Clearing Customer must also use in combination Tags 114 (with the value "N") and 5700 (with the clearing broker's or custody agent's MPID). An IBKR customer who executes and clears through IBKR (a "Cleared Customer") may not use this Tag 6086.	New Order
6091	WhatIf	integer	WhatIf: 6091 = 1	New Order - Single
6107	ParentClientID	String	Used to created orders that are contingent upon the execution of another order. Child orders must specify the ClientOrderID of the parent order. Child orders are not submitted until the parent order fills.	New-Order Single
6115	Trigger Method		Sets the Stop Trigger Method for stops, stop limits, and trailing stops.	New Order

Tag #	Tag Name	Data Type	IBKR Implementation	Used In
6122	OptionAcct	String	Specifies the order capacity. This tag take precedence over all other order capacity tags. Valid Values: c = Customer f = Firm m = Market Maker b = Broker Dealer n = Away Market Maker y = Specialist in Underlying j = Joint Back Office	New Order
6123	ConditionConID	String	IBKR's internal contract ID	New Order-Single
6124	ConditionExchange	Exchange	The condition needs to be met based upon market data from this exchange	New Order-Single
6125	ConditionriggerPrice	Price	The trigger price for the condition	New Order-Single
6126	ConditionOperand	String	The condition operation Valid Values: <= >=	New Order-Single
6127	ConditionTriggerMethod	Int	Trigger method for the condition Valid Values: 1 = Double Bid/Ask 2 = Last 3 = Double Last 4 = Bid/Ask	New Order-Single
6128	ConditionIgnoreRegularTradingHours	Int	Setting to allow for the triggering of conditional orders outside regular market hours. Valid Values: 1 = Allow triggering outside of regular trading hours If tag is omitted, triggering will be limited to regular trading hours.	New Order-Single
6136	Condition List Size	float	The number of conditions in the message	New Order-Single
6137	ConditionLogicOperantBinder	Char	The logical binder used with multiple conditions. a = and o = or n = non defined (should only be used with the last condition in a list)	New Order-Single
6143	DailyNewID	Char	ID number associated with a particular bulletin	Bulletin
6152	StockRangeLower	Price	Used in conjunction with the custom Tag 18=s (peg to stock) function. This tag specifies the lower range of the underlying range for a delta order. If the underlying stock goes below this value, the order is canceled	New Order-Single
6153	StockRangeUpper	Price	Used in conjunction with the custom Tag 18=s (peg to stock) function. This tag specifies the lower range of the underlying range for a delta order. If the underlying stock goes above this value, the order is canceled	New Order-Single
6154	Delta	Float	Used in conjunction with the custom Tag 18=s (peg to stock) function. This tag specifies the delta to be used in the order. Value must be between -100 and 100. (the sign is ignored)	New Order-Single

Tag #	Tag Name	Data Type	IBKR Implementation	Used In
6165	ConditionUnderlying	String	Underlying symbol of the product upon which the condition exists.	New Order-Single
6166	ConditionStrike	Price	The strike price of the security if it is an option	New Order-Single
6167	ConditionRight	Char	The right of an option (call or put) Valid Values: C = Call P = Put	New Order-Single
6168	ConditionExpiry	Month year	The expiration year and month (for futures or options) Format: (yyyymm)	New Order-Single
6169	ConditionSecurityType	String	Specifies the security type in a conditional order	New Order-Single
6170	ConditionLocalSymbol	String	Specifies the IBKR Local Symbol of the product you are making an order conditional upon	New Order-Single
6173	DiscretionaryType	Int	For use with the P.I.P. order type on the BOX. Specifies the Auction Strategy for the P.I.P. order 1 = Discretionary Matching 2 = Discretionary Improving 3 = Transparent	New Order-Single
6205	ForceOnlyRTH	Int	1=ForceOnlyRTH is ON	New Order Single
6215	LegLocateReqd	Boolean	Same as 114 – Used for combination orders Valid codes = "N" or "Y." Required for multi-leg short sale orders involving U.S. equity securities ("stocks"). If customer uses IBKR as its executing broker but uses a clearing broker other than IBKR (a "Non-Cleared Customer") and Tag 624 contains the value "5" and Tag 6086 contains the value "1" or "2", this Tag 6215 must contain the value "N". IBKR will not accept a short sale order if a Non-Cleared Customer enters the value Y in Tag 6215. If customer uses IBKR as both its executing broker and clearing broker (a "Cleared Customer"), then such Cleared Customer is not required to populate this field. However, a Cleared Customer does have the option to populate this Tag 6215 only with the value "Y" (not the value "N"). If a Cleared Customer wishes to populate Tag 6216, the value must = IBKRKR (IBKR's MPID).	New Order - Multileg

Tag #	Tag Name	Data Type	IBKR Implementation	Used In
6216	LegLocateBroker	String	Same as 5700 – Used for combination orders Tag 6216 (a four letter clearing broker or custodian MPID) is required for multi-leg short sale orders involving U.S. stocks to indicate the present location of the shares that are to be delivered in connection with customer's short sale order. Customers who use IBKR as their executing broker only, must enter a valid Market Participant Identifier ("MPID") for the clearing broker or other custodian with whom the customer has arranged to borrow the shares that are to be delivered in connection with customer's short sale order. A list of MPID's is located at: http://www.interactivebrokers.com/MPIDlist. If you do not see a valid MPID for your clearing broker or custodian, you must send an e-mail to: proserve@interactivebrokers.com. (Note: This field will be automatically populated with the MPID "IBKRKR" for those customers who use IBKR as both their executing broker and clearing broker). *If more than one MPID needs to be included, you can list more than one using a comma (,) as a delimiter.	New Order – Multileg
6217	CondPrimaryExch	String	Used if condition symbol would be otherwise ambiguous	New Order - Single
6218	CondCurrency	String	Used if condition symbol would be otherwise ambiguous	New Order - Single
6222	ConditionType	Integer	Used if sending ConditionType other than Price (default if tag 6222 not specified) is desired. 1=Price, 3=Time, 4=Margin Cushion, 5=Trade, 6=Volume	New Order - Single
6223	ConditionTime	UTCTimeStamp	Required if 6222=3, format: yyyymmdd-hh:mm:ss	New Order - Single
6245	ConditionMargin	Integer	Required if 6222=4, format: integer	New Order - Single
6246	ConditionExecutionPattern	String	Required if 6222=5, format: string	New Order - Single
6248	SmartComboGuarantee	Integer	Used with SMART routed combos to specify whether inter-exchange SMART combos are to be guaranteed or non-guaranteed. 0 = Guaranteed 1 = Non-Guaranteed 6248=1 required for STK/STK combo orders	New Order - Multileg
6257	NoBarriers	Integer	Specifies the number of "barriers" used in the adjustable stop order type.	New Order Single
6258	BarrierPrice	Price	Specifies the trigger price for the barrier. (required if 6257 >0)	New Order Single
6259	BarrierStopPrice	Price	Specifies the new stop price once the barrier is reached.	New Order Single
6260	BarrierTrailingAmt	Price	Specifies the new trailing amount once the barrier is reached	New Order Single
6261	BarrierPriceDelimiter	String	Specifies the order type when the barrier is reached. Valid Values: 3 = Stop 4 = Stop Limit T = Trailing Stop TSL = Trailing Stop Limit	New Order Single
6262	BarrierLimitPrice	Price	Specifies the new limit price once the barrier is reached.	New Order Single

Tag #	Tag Name	Data Type	IBKR Implementation	Used In
6263	ConditionVolume	Integer	Required if 6222=6	New Order Single
6268	TrailingAmtUnit	String	Specifies the trail method used: Valid Values: 6268=0 – Absolute offset used 6268=100 – Percentage offset used	New Order – Single (trailing stop orders)
6269	BarrierTrailingAmtUnit	String	Specifies the trail method used for Barrier orders: Valid Values: 6268=0 – Absolute offset used 6268=100 – Percentage offset used	New Order – Single (trailing stop orders)
6271	CheapToReroute	Int	Specifies whether to route non-marketable orders to exchanges that charge cancellation fees. Valid Values: 6271=1 – Confirm route to exchanges where there are no cancellation fees.	New Order
6273	PipExchanges	String	If provided, this tag contains a comma-separated list of exchanges where the order is participating in the PIP process as a liquidity-providing (LP) orders. This field must be used by market makers on BOX to comply with the BOX rule that states that each entity can only send one order at one price for any particular PIP auction. IBKR may either send this field on original order acknowledgement, or may send it on subsequent unsolicited order status messages if this order becomes a LP order for PIP. IBKR will then later send an unsolicited order status if and when this order is no longer participating in the PIP. IBKR won't send anything if the order becomes fully filled due to and during the PIP.	Execution reports – Acks & unsolicited order status
6275	ContinuousUpdate	String	Used in IBKR Volatility Orders 1=Use initial volatility calculation only 2=Continuously update the price as volatility calculation changes 3=Price for main order specified by client	New Order (IBKR Volatility Orders)
6279	UnderlyingRefPrice	String	Used in IBKR Volatility Orders 1=midpoint 2=bid or ask	New Order (IBKR Volatility Orders)
6280	IsDeltaHedge	String	Used in IBKR Volatility Orders	New Order (IBKR Volatility Orders)
6281	XcrossC1OrdID	String	ISE Facilitation Order Firm side for C1OrdID (firm equivalent to tag 11)	New Order – Single (ISE FOK only)
6282	XCrossClearingFirm	String	ISE Facilitation Order Firm's ClearingFirm (firm equivalent to tag 439)	New Order – Single (ISE FOK only)
6283	XCrossClearingAccount	String	ISE Facilitation Order Firm's ClearingAccount (firm equivalent to tag 440)	New Order – Single (ISE FOK only)
6284	XCrossOpenClose	String	ISE Facilitation Order Firm's OpenClose (firm equivalent to tag 77)	New Order – Single (ISE FOK only)
6285	XCrossOptionAcct	String	ISE Facilitation Order Firm's OptionAcct (firm equivalent to tag6122)	New Order – Single (ISE FOK only)
6286	FacilitationPercentage		ISE Facilitation Order Desired percentage	New Order – Single (ISE FOK only)
6287	NotHeld	Boolean	Required with a value of "1" on all new orders (35=D) for stock quoting customers Valid Values: (0 = false , 1 = true)	New Order – Single

Tag #	Tag Name	Data Type	IBKR Implementation	Used In
6290	HedgingType	String	Used in IBKR Volatility Orders Valid Values: -1=No Hedging 1=MKT Hedging 2=Limit Order Hedge E=Relative Order Hedge	New Order (IBKR Volatility Orders)
6370	TrailLimitOffset	Number	Used in trailing stop limit orders to specify the offset of the limit price. Can be positive, negative, or zero	New Order - Single
6406	StagedOrder	Number	Used to identify if an order will be staged to the TWS Blotter screen Valid Values: 1=Yes 0=No (defaults to 0 if omitted)	New Order - Single
6436	tDeactivateOnClose	Integer	Used in IBKR Algo Orders to deactivate an order at the close of the current trading day. 1=deactivate the order at the end fo the day. 0=do not deactivate at the end of the day. (defaults to 0 if omitted)	New Order (IBKR Algo Orders)
6458	DividendSchedule	String	Used in IBKR Volatility Orders Valid Format: Yyyymmdd/value,yyyymmdd/value etc.	New Order (IBKR Volatility Orders)
6459	InterestSchedule	String	Used in IBKR Volatility Orders Valid Format: Yyyymmdd/value,yyyymmdd/value etc.	New Order (IBKR Volatility Orders)
6460	IsDeltaHedge	String	Used in IBKR Volatility Orders Valid Values: 1=Hedging Order Anything else or omitted=NOT hedging order	New Order (IBKR Volatility Orders)
6467	VolatCapPercentage	Percentage	Used in IBKR Volatility Orders Percentage in decimal form	New Order (IBKR Volatility Orders)
6468	VolatCapTicks	String	Used in IBKR Volatility Orders Price tick offset in decimal form	New Order (IBKR Volatility Orders)
6521	Deactivate	Integer	6521=1 will deactivate or "Pause Order"	Cancel/Replace (35=G)
6559	ConsiderExecCost	Integer	Only available for clients with unbundled commissions 1 = Highest Rebate 2 = Primary Exchange 3 = Highest Volume Exchange with Rebate 4 = Highest Volume Exchange with Lowest Fee	New Order Single
6568	ExchangeExecID	String	Execution ID as reported by order execution venue.	Execution Reports
6579	CondSubmitCancel	Integer	Specifies if the order should be submitted or canceled if the condition is met 0 = Submit 1 = Cancel	New Order - Single
6580	StockRefPrice	String	Stock reference price for pegged to stock orders. (i.e. Option order Price = auxPrice + (NBBO - stockRefPrice) * delta)	New Order - Single
6596	GTCExpireTime	Date/time	Used to identify the date/time that GTC order will expire within IBKR system. Format: yyyymmdd-hh:mm:ss	Execution Reports
6636	ProfessionalCustomer	Integer	Allows routing firms to designate an order as being routed by a "professional customer" as determined by the order routing firm. IBKR will pass this designation on to destination option exchange. 1 = True 0 = False (default)	New Order - Single
6665	HedgeType	integer	Used in Pair Trade 6665 = 3 (Pair Trade)	New Order Single

Tag #	Tag Name	Data Type	IBKR Implementation	Used In
6666	HedgeRatio	integer	Used in Pair Trade 6666 = Rate used to compute child order size Example: 1.8 (parent order size = 100, 180 will be used for child)	New Order Single
6680	LegClearingFirm	String	Per-Leg clearing for combo orders. Order should contain blank values for all legs except stock legs	New Order - Multileg
6882	UseNetPrice	Integer	Specifies whether net pricing should be used over standard raw pricing. 1 = Use net price 0 = Use raw price (default)	New Order Single (Fixed Income Orders)
6737	ImbalanceOnly	Integer	Used in Imbalance Orders, use case is 6737=1	New Order Single
8237	Mifid2DecisionMakerShortCode	String	Mifid2 Code used to demine IBKR's assigned short code for decision maker for the order.	New Order Single
8243	Mifid2DecisionAlgo	String	Mifid2 Algo used to demine decision maker ALGO for the order.	New Order Single
8254	Mifid2ExecutionTrader	String	Name of person or IB assigned short code who is responsible for the execution within the firm	New Order Single
8255	Mifid2ExecutionAlgo	String	Name of ALGO or IB assigned short code who is responsible for the execution within the firm	New Order Single
8700	AllowPastEndTime	String	Distinct Parameter for IBKR Algo Orders 1 = yes 0 = no	NewOrder Single (IBKR ALGO Orders)
8701	DisplaySize	Integer	Distinct Parameter for IBKR Algo Orders	NewOrder Single (IBKR ALGO Orders)
8702	EndTime	Date/time	Distinct Parameter for IBKR Algo Orders Format: yyyymmdd-hh:mm:ss	NewOrder Single (IBKR ALGO Orders)
8703	ForceCompletion	String	Distinct Parameter for IBKR Algo Orders 1 = true 0 = false	NewOrder Single (IBKR ALGO Orders)
8706	PctVol	Intger	Distinct Parameter for IBKR Algo Orders	NewOrder Single (IBKR ALGO Orders)
8707	RiskAversion	String	Distinct Parameter for IBKR Algo Orders One of these 4 values: Aggr / Pass / Neut / GetDon	NewOrder Single (IBKR ALGO Orders)
8708	StartTime	Date/time	Distinct Parameter for IBKR Algo Orders Format: yyyymmdd-hh:mm:ss	NewOrder Single (IBKR ALGO Orders)
9816	ImpVolatility	String	Used in IBKR Volatility Orders Volatility in decimal form (decimal percentage)	New Order (IBKR Volatility Orders)