

New Trading Platform

ASX FIX Drop Copy Specification

Version 2.03 | August 2018

INFORMATION CLASSIFICATION - CONFIDENTIAL



Table of Contents

| | | |
|--------|--|----|
| 1. | FIX Drop Copy Introduction | 4 |
| 1.1. | Supported Versions..... | 4 |
| 1.2. | Document Information | 5 |
| 1.2.1. | Terms and Acronyms | 5 |
| 1.2.2. | Usage of String Datatypes | 5 |
| 1.2.3. | Usage of UTCTimestamp | 6 |
| 1.2.4. | Handling of unsupported messages and tags..... | 6 |
| 1.2.5. | Definition of required column values | 6 |
| 1.3. | Version History | 6 |
| 2. | Common Message Structures..... | 8 |
| 2.1. | Standard Header | 8 |
| 2.2. | Standard Trailer | 9 |
| 3. | FIX Session Layer..... | 11 |
| 3.1. | Connecting to the FIX Server Process | 11 |
| 3.2. | Lost connection..... | 11 |
| 3.3. | Logon (A)..... | 12 |
| 3.4. | Heartbeat (0) | 16 |
| 3.5. | TestRequest (1)..... | 17 |
| 3.6. | ResendRequest (2)..... | 18 |
| 3.7. | Reject (3)..... | 19 |
| 3.8. | SequenceReset (4) | 21 |
| 3.9. | Logout (5)..... | 22 |
| 4. | Drop Copy Message Details | 24 |
| 4.1. | ExecutionReport (8) | 24 |
| 4.1.1. | ExecutionReport (8) Examples..... | 34 |
| 4.2. | TradeCaptureReport (AE)..... | 35 |
| 4.2.1. | TradeCaptureReport (AE) Example..... | 41 |
| 4.3. | PartyRiskLimitsReport (CM) | 42 |

| | | |
|--------|--|----|
| 4.3.1. | PartyRiskLimitReport (CM) Example..... | 45 |
| 4.4. | TradeCaptureReportRequest (AD)..... | 46 |
| 4.4.1. | TradeCaptureReportRequest (AD) Example..... | 47 |
| 4.5. | TradeCaptureReportRequestAck (AQ)..... | 48 |
| 4.5.1. | TradeCaptureReportRequestAck (AQ) Examples | 49 |
| 4.6. | QuoteRequest (R) | 50 |
| 4.6.1. | QuoteRequest (R) Example..... | 51 |
| 5. | General Messages..... | 53 |
| 5.1. | News (B)..... | 53 |
| 5.2. | BusinessMessageReject (j)..... | 54 |
| 5.2.1. | BusinessMessageReject (j) Example | 54 |



1. FIX Drop Copy Introduction

ASX provides the facility to receive copies of outbound messages pertaining to a participant's order and execution flow using the FIX protocol. Drop copies can be used to produce a consolidated view of order status for a configured set of users. A Trading participant may require drop copies of all executions for trading users within the same firm, or another firm under agreement. Drop copy can be particularly useful for clearing members wanting to consolidate all trades for clients that the Clearing firm is responsible for.

This document provides guidance on using FIX protocol messages to:

- Establish and maintain a FIX session
- Receive information about orders and trades
- Request for trades (fills) for a specified date range

These rules of engagement are based on the FIX 5.0 SP2 specification with extension pack 196 and best practice guidelines as published by the [FIX Trading Community](#). Unless specifically stated, field numbers, names, and data types are as published by the FIX specification. A full explanation of the FIX protocol is out of scope of the document therefore customers should refer to [FIX Trading Community](#) for a full understanding of the protocol, prior to using this guide.

Several other aspects of operating the services need to be taken into consideration in effectively utilising the drop copy service, such as:

- Support for drop copy users
- Pre-trade risk management
- Trading protection limits
- Failover

Details on these aspects can be found on the ASX website and from your Technical Account Manager.

1.1. Supported Versions

The Financial Information eXchange (FIX) protocol is a message standard developed to facilitate the electronic exchange of information related to securities transactions. It is intended for use between trading partners wishing to automate communications.

ASX Gateways support FIX version 5.0 SP2 EP 196.

A detailed description of FIX is available from <http://www.fixtradingcommunity.org> and includes all the technical specifications.



1.2. Document Information

This document describes:

- Common message structures, including standard header and standard trailer definitions
- FIX session layer—how FIX sessions are established and maintained
- Business layer introduction—general aspects of the business layer of the protocol
- Drop copy messages—valid drop copy messages.

Please refer to the ASX FIX Drop Copy Specification Updates document to see changes between the V1.01 and V1.02 specifications.

1.2.1. Terms and Acronyms

| Term / Acronym | Description |
|----------------|---|
| FIX | Financial Information eXchange Protocol |
| FPL | FIX Protocol Limited |
| ISIN | International Securities Identification Number. Unique identifier issued to identify each financial instrument. |
| UTC | Coordinated Universal Time is a high-precision, atomic time standard often referred to as GMT. |
| CFI | Classification of Financial Instruments |

1.2.2. Usage of String Datatypes

String datatype field definitions, that do not have specified values or lengths in FIX, have been updated to display field lengths, in square brackets, supported by ASX. For example, String [19] indicates that 19 characters is the maximum number of characters that ASX will send or process on incoming messages.

In cases where the data length is dependent on other parameters, the phrase *see comment* appears instead, indicating that additional details are available in the Comment column. For example, the PartyID (448) datatype is specified as *String [see comment]* because it depends on the PartyRole (452) being transmitted.



1.2.3. Usage of UTCTimestamp

NTP supports the UTCTimestamp second (YYYYMMDD-HH:MM:SS) and milliseconds (YYYYMMDD-HH:MM:SS.sss) formats. Times with higher precision or that do not meet those formats will be rejected.

1.2.4. Handling of unsupported messages and tags

Any message that is not listed in this specification will be rejected.

If a message listed in this specification is received with a tag that is not in the specification, the message will be rejected.

1.2.5. Definition of required column values

For messages transmitted to ASX

| Value | Definition |
|-------|---|
| Y | Defined as required in FIX 5.0 SP2 EP 196. |
| C | Conditionally required by either FIX protocol or by ASX to implement functionality. |
| Blank | Tag may be omitted. |

For messages transmitted from ASX

| Value | Definition |
|-------|---|
| Y | Defined as required in FIX 5.0 SP2 EP 196. |
| Blank | Always provided by ASX unless text specifies otherwise. |

1.3. Version History

This document has been revised according to the table below:

| Version | Date | Comment |
|---------|----------------|--|
| V1.0 | July 2016 | Final release of specification. |
| V1.01 | August 2016 | Added documentation errata and changes per delta document. |
| V1.02 | September 2016 | Corrective Release updates – details are included in the Updates document. |



| Version | Date | Comment |
|---------|---------------|---|
| V1.03 | December 2016 | Added documentation errata and changes per delta document. |
| V1.04 | January 2017 | Added additional information surrounding Cancel on Disconnect |
| V1.05 | April 2017 | Miscellaneous clarifications on the following messages: <ul style="list-style-type: none"> • ExecutionReport (8) • TradeCaptureRequest (AE) |
| V2.00 | July 2017 | Changes for the Service Release <ul style="list-style-type: none"> • Addition of QuoteRequest (R) message • Removal <i>PartyRole</i> of <i>Contra clearing firm</i> (452=18) |
| V2.01 | August 2017 | <ul style="list-style-type: none"> • Clarify Logon (A) to request waiting for Logon ack before sending messages. • Clarify meaning of MatchInst (1625) on multileg trades • Detail how unsupported messages and tags are handled |
| V2.02 | December 2017 | <ul style="list-style-type: none"> • Clarified when SecurityExchange (207) is transmitted in ExecutionReport (8) messages. |
| V2.03 | August 2018 | <ul style="list-style-type: none"> • Clarify what UTCTimestamp format NTP accepts |

2. Common Message Structures

2.1. Standard Header

All FIX messages described in this document contain a standard header, which is defined below.

| Tag | Name | Data Type | Reqd | Comment |
|-----|-------------------|-----------|------|---|
| 8 | BeginString | String | Y | Identifies beginning of new message and protocol version. Always first field in message. Valid values: FIXT.1.1 |
| 9 | BodyLength | Length | Y | Message length, in bytes, forward to the CheckSum field. Always second field in message. |
| 35 | MsgType | String | Y | Defines message type. Always third field in message. See individual messages for value to be used. |
| 49 | SenderCompID [64] | String | Y | Identifies the sender of the message. |
| 56 | TargetCompID [64] | String | Y | Identifies the receiver of the message. |
| 34 | MsgSeqNum | SeqNum | Y | Message sequence number. |
| 43 | PossDupFlag | Boolean | C | Required for retransmitted messages. Indicates possible retransmission of message with this sequence number. Valid values: N = Original Transmission Y = Possible duplicate. |



| Tag | Name | Data Type | Reqd | Comment |
|-----|------------------------|--------------|------|--|
| 97 | PossResend | Boolean | C | Supplied when message may be a duplicate of another message sent under a different sequence number. ASX may send PossResend=True (97=Y) messages after a standby FIX engine has been promoted to act as primary. ASX does not support PossResend (97) on incoming messages. |
| 52 | SendingTime | UTCTimestamp | Y | Time of transmission in UTC. |
| 122 | OrigSendingTime | UTCTimestamp | C | Required for messages sent as a result of a ResendRequest. Original time of message transmission in UTC. |
| 369 | LastMsgSeqNumProcessed | SeqNum | | The last MsgSeqNum (34) value received by the FIX engine and processed by downstream application, such as trading engine or order routing system. Can be specified on every message sent. Useful for detecting a backlog with a counterparty. |

2.2. Standard Trailer

All FIX messages in this document contain a standard trailer, which is defined below.

| Tag | Name | Data Type | Reqd | Comment |
|-----|----------|-----------|------|--|
| 10 | Checksum | String | Y | Simple checksum (see Volume 2: "Checksum Calculation" for description in FIX Trading Community FIX Session Layer). |



| Tag | Name | Data Type | Reqd | Comment |
|-----|------|-----------|------|--|
| | | | | 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. |



3. FIX Session Layer

3.1. Connecting to the FIX Server Process

Each FIX client must maintain the address and port for the primary and the standby ASX FIX server. If a server cannot be reached, we recommend performing the following steps:

- Attempt to connect to the other server (standby, if primary attempted and primary, if standby attempted)
- Wait five seconds, and then try to connect to the server again.

3.2. Lost connection

When reconnecting, the subscriber should login again to the session using the next transmitted sequence number. In the event that the sequence number(s) are out of sync, the session should be resynchronised using either standard FIX recovery or NextExpectedMsgSeqNum processing, depending on the type of Login (A) message issued.

Messages about activity that occurs when a FIX session is disconnected are queued and are available to be sent upon reconnection. Examples of such messages are fills on trades and cancellation reports on orders marked for Cancel on Disconnect.



3.3. Logon (A)

The logon message is the first message sent by a user and is used to authenticate the FIX session with the exchange. On successful authentication, the response is a Logon (A) message. The user should wait for the confirming Logon (A) message before sending other messages. Messages sent prior to this confirmation may not be processed.

In the event that logon fails, a Logout (5) message will be sent and the TCP/IP session will be terminated under most circumstances. Circumstances when a Logout (5) message is not sent, include an invalid SenderCompID (49) or TargetCompID (56). See the FIX Trading Community FIX Session Layer for circumstances when a Logout (5) message should not be issued.

If a logon attempt fails, the client should attempt no more than 3 times before taking remedial action requested in the Logout message. Remedial action includes changing the password sent on the Logon (A) message, correcting sequence numbers, or contacting ASX regarding account administration.

The password can be changed by specifying the new password in the NewPassword (925) tag.

Recovery is supported using the ResendRequest (2) and NextExpectedMsgSeqNum (789). Please see the FIX Trading Community FIX Session Layer description for full details of these methods of recovery handling.

Note that if ASX responds to a Logon request with a NextExpectedMsgSeqNum (789) value, indicating that messages should be resent (that is, an implied ResendRequest), the requested messages must be resent before sending any other messages. Any other messages sent by the client will be rejected with a BusinessMessageReject (j) message.

The following points should be noted when reconnecting to the secondary (standby) FIX server:

- NextExpectedMsgSeqNum (789) must be specified on the Logon (A) message



- Messages may be sent with PossResend=true (97=Y) for activity that FIX server detects, but cannot ascertain if the message was sent by the previous FIX server.

| Tag | Name | Data Type | Reqd | Comment |
|-----|-----------------|-----------|------|---|
| | StandardHeader | | Y | MsgType = A |
| 98 | EncryptMethod | int | Y | Method of encryption. ASX does not use FIX encryption, however this field is required by FIX 5.0 SP2. Please set to zero to specify no encryption. Other valid values are accepted, but will not have any effect. Valid values: 0 = None/Other. |
| 108 | HeartBtInt | int | Y | Heartbeat interval in seconds. The same value is used by both sides. Specified by the logon initiator and reflected by the acceptor (ASX). ASX supports values between 5 and 60, recommending 30. ASX does not support a value of zero. Any other values may be accepted but are not supported. |
| 141 | ResetSeqNumFlag | Boolean | | Indicates both sides of a FIX session should reset sequence numbers. Valid values: N = No Y = Yes, reset sequence numbers. Note MsgSeqNum (34) should be set to 1. |



| Tag | Name | Data Type | Reqd | Comment |
|-----|-----------------------|--------------|------|--|
| 789 | NextExpectedMsgSeqNum | SeqNum | | Next expected MsgSeqNum value to be received. Required when connecting to the secondary (standby) FIX Drop Copy server. Please see the FIX Trading Community FIX Session Protocol description on the use of this tag for recovery. |
| 553 | Username | String [64] | C | FIX username. |
| 554 | Password | String [128] | C | Password for username. |
| 925 | NewPassword | String [128] | | Specifies a new password for the FIX Logon. The new password is used for subsequent logons. The new password must meet at least three of the following criteria: <ul style="list-style-type: none"> Contain an English upper case character (A-Z) Contain an English lower case character (a-z) Contain a Hindu Arabic numeral (0-9) Contain one or more of the following non-alphanumeric special characters: !@#\$%^&*()_+ ~=-\{}[]:;'<>?,./) Contain any character that is categorized as an alphabetic character but is not uppercase or lowercase; this includes characters from Asian languages. Passwords must be a minimum of 8 characters in length. |



| Tag | Name | Data Type | Reqd | Comment |
|------|-----------------|----------------------|------|--|
| | | | | <p>Passwords are valid for 90 days and when reset must be different to the previous 12 passwords used.</p> <p>The account will lock after 6 failed attempts.</p> |
| 1409 | SessionStatus | int | | <p>Status of the FIX session. Sent by ASX. Ignored if input by client.</p> <p>Valid values:</p> <p>0 = Session active</p> <p>1 = Session password changed.</p> |
| 1137 | DefaultAppVerID | String | Y | <p>Specifies the service pack release being applied to the message at the session level.</p> <p>Valid values:</p> <p>9 = FIX50SP2</p> |
| 58 | Text | String [see comment] | | <p>Free format text string.</p> <p>Up to 128 characters on incoming message. Outgoing messages may exceed 128 characters.</p> |
| | StandardTrailer | | Y | |



3.4. Heartbeat (0)

Heartbeat messages are sent by counterparties to indicate that a connection is still active and as a response to TestRequest (1) messages. Behaviour is as described in the FIX Trading Community FIX Session Layer.

| Tag | Name | Data Type | Reqd | Comment |
|-----|-----------------|-------------|------|---|
| | StandardHeader | | Y | MsgType = 0 |
| 112 | TestReqID | String [64] | | Identifier included in Test Request message to be returned in resulting Heartbeat. Required when the heartbeat is the result of a Test Request message. |
| | StandardTrailer | | Y | |



3.5. TestRequest (1)

To verify a connection is active, a TestRequest (1) message is sent to the counterparty. The recipient of the TestRequest responds with a Heartbeat (0) message. Failure to respond to a TestRequest message may trigger a disconnection by the sender.

The behaviour is as described in the FIX Trading Community FIX Session Layer.

| Tag | Name | Data Type | Reqd | Comment |
|-----|-----------------|-------------|------|--|
| | StandardHeader | | Y | MsgType = 1 |
| 112 | TestReqID | String [64] | Y | Identifier of this Test Request. To be returned in the Heartbeat generated upon receipt of the Test Request. |
| | StandardTrailer | | Y | |



3.6. ResendRequest (2)

The ResendRequest (2) message is sent to request the retransmission of messages. Note that either party may send a ResendRequest.

When the client receives a ResendRequest (2) from the ASX, the requested messages must be resent before sending any other messages. Until the requested messages have been received by ASX, messages sent by the client will be rejected with a BusinessMessageReject (j) message.

The behaviour is as described in the FIX Trading Community FIX Session Layer.

| Tag | Name | Data Type | Reqd | Comment |
|-----|-----------------|-----------|------|---|
| | StandardHeader | | Y | MsgType = 2 |
| 7 | BeginSeqNo | SeqNum | Y | Message sequence number of first message in range to be resent. |
| 16 | EndSeqNo | SeqNum | Y | Message sequence number of last message in range to be resent. If all messages subsequent to BeginSeqNo are required, set EndSeqNo=0. |
| | StandardTrailer | | Y | |



3.7. Reject (3)

The reject message is issued when a message is received but cannot be properly processed due to a session-level, rule violation. As an example, a reject can be issued on receipt of a message with invalid basic data, which successfully passes decryption, check sum, and body length checks. Behaviour is as described in the FIX Trading Community FIX Session Layer.

| Tag | Name | Data Type | Reqd | Comment |
|-----|---------------------|-----------|------|--|
| | StandardHeader | | Y | MsgType = 3 |
| 45 | RefSeqNum | SeqNum | Y | MsgSeqNum of rejected message. |
| 371 | RefTagID | int | | The tag number of the FIX field being referenced. |
| 372 | RefMsgType | String | | The MsgType (35) of the FIX message being referenced. |
| 373 | SessionRejectReason | int | | Code to identify reason for a session-level Reject message. Valid values: 0 = Invalid Tag Number 1 = Required Tag Missing 4 = Tag specified without a value 5 = Value is incorrect (out of range) for this tag 6 = Incorrect data format for value 9 = CompID problem 10 = SendingTime accuracy problem 11 = Invalid MsgType 13 = Tag appears more than once. 14 = Tag specified out of required order. |



| Tag | Name | Data Type | Reqd | Comment |
|-----|-----------------|----------------------|------|--|
| 58 | Text | String [see comment] | | Where possible, message to explain reason for rejection. Up to 128 characters on incoming message. Outgoing messages may exceed 128 characters. |
| | StandardTrailer | | Y | |



3.8. SequenceReset (4)

The SequenceReset (4) message is used to inform the counterparty of a new, higher sequence number. This is required in order to skip one or more messages when responding to a ResendRequest (2), or to set a new sequence number after an unrecoverable error.

The behaviour is as described in the FIX Trading Community FIX Session Layer.

| Tag | Name | Data Type | Reqd | Comment |
|-----|-----------------|-----------|------|---|
| | StandardHeader | | Y | MsgType = 4 |
| 123 | GapFillFlag | Boolean | | Indicates that the Sequence Reset message is replacing administrative or application messages, which will not be resent. Valid values: N = Sequence Reset, ignore MsgSeqNum Y = Gap Fill Message, MsgSeqNum field valid. |
| 36 | NewSeqNo | SeqNum | Y | New sequence number. |
| | StandardTrailer | | Y | |



3.9. Logout (5)

The logout message is used to initiate or confirm the termination of a FIX session. Logout is normally initiated by the client. The ASX may also initiate a logout, for example, prior to system shutdown.

A Logout message is also used to respond to failed Login (A) requests. On completion of the logout procedure, ASX will close the TCP/IP connection. The logout process followed is as described in the FIX Trading Community FIX Session Layer.

| Tag | Name | Data Type | Reqd | Comment |
|------|----------------|----------------------|------|--|
| | StandardHeader | | Y | MsgType = 5 |
| 58 | Text | String [see comment] | | Free format text string. Up to 128 characters on incoming message. Outgoing messages may exceed 128 characters. |
| 1409 | SessionStatus | int | | Status of the FIX session. Not sent for scheduled server initiated log outs, for example, when the server is shutting down. Valid values: 3 = New session password does not comply with policy 4 = Session logout complete 5 = Invalid username or password 6 = Account locked 7 = Logons are not allowed at this time 8 = Password expired 9 = Received MsgSeqNum(34) is too low 10 = Received NextExpectedMsgSeqNum (789) is too high. 101 = Requested MsgSeqNum unknown (a request has been made for a sequence number that has not been sent by the server). |



| Tag | Name | Data Type | Reqd | Comment |
|-----|-----------------|-----------|------|--|
| | | | | 103 = MsgSeqNum (34) must be 1 when ResetSeqNumFlag=true (141=Y) 104 = HeartBtInt (108) must be greater than 1 105 = NextExpectedMsgSeqNum (789) must be set after FIX server failover 106 = Logon (A) message could not be recognised 107 = Logon (A) message rejected due to other reasons (see Text (58) for further information) 108 = Unsolicited logout from server (see Text (58) for further information) |
| | StandardTrailer | | Y | |



4. Drop Copy Message Details

The following sections cover all supported session messages.

4.1. ExecutionReport (8)

Execution Report (8) messages are used to transmit information about new orders, order modifications, cancellations, and fills. Drop copy execution reports contain the same business information as the execution reports transmitted to the order originator. The following should be noted:

- ClOrdID (11) and OrigClOrdID (41) are as entered on the original connection. For drop copy connections that report the activity of more than one FIX connection, these values may not be unique. OrderID (37), which is supplied by the exchange, is unique and can be used to identify the order.
- Parties block is used to communicate the entities involved, and their roles within the message.
- CopyMsgIndicator is included in all drop copy messages, and is set to Y.

| Tag | Name | Data Type | Reqd | Comment |
|-----|------------------|--------------|------|---|
| | StandardHeader | | Y | MsgType = 8 |
| 37 | OrderID | String [19] | Y | Unique identifier for the order as assigned by ASX. Private to the member firm entering the order. Returned as zero for execution reports notifying of the bust of a leg trade of a spread order. |
| 198 | SecondaryOrderID | String [19] | | Unique identifier for the order as assigned by ASX. Provided on public market data. |
| 11 | ClOrdID | String [128] | | Identifier provided by the client. |
| 41 | OrigClOrdID | String [128] | | Identifier provided by client. |



| Tag | Name | Data Type | Reqd | Comment |
|-----|------------------|-------------|------|---|
| 797 | CopyMsgIndicator | Boolean | | Indicates whether or not this message is a drop copy of another message. Always included in drop copy messages. Valid values: Y = Message is a drop copy. |
| 17 | ExecID | String [84] | Y | Unique identifier for the trade assigned by ASX. |
| 19 | ExecRefID | String [84] | | Execution reference identifier. Supplied when ExecType=Trade Cancel (150=H). |
| 880 | TrdMatchID | String [10] | | Identifier assigned to a trade by ASX clearing purposes - clearing deal number. For multi-leg product executions, this value is not sent to the clearing system. See individual legs for the clearing deal number for each leg. Provided when ExecType=Trade (150=F). |
| 39 | OrdStatus | char | Y | Identifies status of order. Valid values: 0 = New 1 = Partially filled 2 = Filled 3 = Done for day 4 = Cancelled C = Expired |



| Tag | Name | Data Type | Reqd | Comment |
|-----|-----------------------|-------------|------|---|
| 150 | ExecType | char | Y | <p>Describes the specific ExecutionReport (8) (e.g. Replaced), while OrdStatus(39) will always identify the current order status (for example, Partially Filled).</p> <p>Valid values:</p> <ul style="list-style-type: none"> 0 = New 3 = Done for day 4 = Cancelled 5 = Replaced C = Expired D = Restated F = Trade (partial fill or fill) H = Trade Cancel. |
| 378 | ExecRestatementReason | int | | <p>The reason for restatement. Supplied when ExecType=Restated (150=D).</p> <p>Valid values:</p> <ul style="list-style-type: none"> 1 = GT renewal / restatement. |
| 1 | Account | String [10] | | Account supplied on the order. |
| 581 | AccountType | int | | <p>Type of account associated with an order.</p> <p>Valid values:</p> <ul style="list-style-type: none"> 1 = Customer 2 = Non-customer. |



| Tag | Name | Data Type | Reqd | Comment |
|-----|-----------|-----------|------|---|
| 574 | MatchType | String | | The point in the matching process at which the trade was matched. Supplied if ExecType=Trade (150=F), ExecType=Trade Cancel (150=H). Also supplied if ExceType=Order Status (150=I) and OrdStatus=Partially Filled (39=1), where the fill occurred in the current trading session. Valid values: 4 = Normal trade 5 = Auction trade S = Combo-to-outright trade R = Combo-to-Combo trade A = Strip to strip B = Strip to outright. |
| 54 | Side | char | Y | Side of order. Valid values: 1 = Buy 2 = Sell |
| 38 | OrderQty | Qty | Y | Total order quantity. |
| 44 | Price | Price | | Price per unit quantity entered on order. |
| 31 | LastPx | Price | | Price of this (last) fill. Supplied if ExecType=Trade (150=F). |
| 6 | AvgPx | Price | | Calculated average price of all fills on this order. Ignore for products quoted in Yield. |
| 15 | Currency | Currency | | Identifies currency used for price. |
| 32 | LastQty | Qty | | Quantity bought/sold on this (last) fill. Supplied if ExecType=Trade (150=F). |



| Tag | Name | Data Type | Reqd | Comment |
|-----|--------------|--------------|------|---|
| 14 | CumQty | Qty | Y | Total quantity filled of all executions for the order. |
| 151 | LeavesQty | Qty | Y | Quantity open for further execution. Set to zero for cancelled orders. |
| 75 | TradeDate | LocalMktDate | | Business trade date. |
| 40 | OrdType | char | | Order type. Valid values: 2 = Limit. |
| 59 | TimeInForce | char | | Specifies how long the order remains in effect. Absence of this field is interpreted as Day. Valid values: 0 = Day (or session) 1 = Good Till Cancel (GTC) 3 = Immediate or Cancel (IOC) 4 = Fill or Kill (FOK) 6 = Good Till Date (GTD). |
| 29 | LastCapacity | char | | Used to indicate capacity of broker. Valid values for XSFE and NZFX: 3 = Cross as principal. |
| 55 | Symbol | String [255] | | Common, human understood representation of the security. |
| 48 | SecurityID | String [10] | | Security identifier value of SecurityIDSource (22) type. |



| Tag | Name | Data Type | Reqd | Comment |
|-------|------------------|----------------------|------|--|
| 22 | SecurityIDSource | String | | Identifies the source of the SecurityID (48) value. Valid values: 8 = Exchange defined. Available as Tradeable Instrument ID. |
| 207 | SecurityExchange | Exchange | | Market of security. Only returned if entered on the NewOrderSingle (D) or OrderCancelReplaceRequest (G). Valid values: XSFE = Sydney Futures Exchange NZFX = New Zealand Futures and Options Exchange. |
| 18 | ExecInst | MultipleCharValue | | Instructions for handling the order. Valid values: o = Cancel on connection loss. |
| 453 | NoPartyIDs | NumInGroup | | Number of PartyID (448), PartyIDSource (447), and PartyRole (452) entries. |
| > 448 | PartyID | String [see comment] | | Identifies the party. Required, if NoPartyIDs > 0. Required, if PartyIDSource is specified. The maximum number of characters depends on the PartyRole (452) value. See PartyRole (452). |
| > 447 | PartyIDSource | char | | Identifies class or source of the PartyID (448) value. Required, if PartyID is specified. Valid values: D = Proprietary/Custom code |



| Tag | Name | Data Type | Reqd | Comment |
|-------|--------------------|------------|------|--|
| > 452 | PartyRole | int | | <p>The role of the party in the transaction. Required if PartyID is specified. Maximum number of characters for each type in [].</p> <p>Valid values:</p> <ul style="list-style-type: none"> 1 = Executing Firm [64] 4 = Clearing Firm [64] 7 = Entering Firm [64] 11 = Order Origination Trader [64] 12 = Executing Trader [64] 17 = Contra Firm [64] 24 = Customer Account [15] 29 = Intermediary [64] 36 = Entering Trader [64] 45 = Secondary Account Number [32] 76 = Desk ID (Identifies the shared order group that this order is part of). [10] |
| 1057 | AggressorIndicator | Boolean | | <p>Used to identify whether the order initiator is an aggressor or not in the trade.</p> <p>Valid values:</p> <ul style="list-style-type: none"> Y = Order initiator is aggressor N = Order initiator is passive. |
| 1624 | NoMatchInst | NumInGroup | | <p>Number of instructions in the MatchingInstructions repeating group. MatchingInstructions are used to indicate whether UCP was applied to an order, or activated on a trade resulting from the order.</p> |



| Tag | Name | Data Type | Reqd | Comment |
|--------|------------------|--------------|------|---|
| > 1625 | MatchInst | int | | <p>Matching instruction. Supplied if NoMatchInst > 0</p> <p>Valid values:</p> <p>1 = Match: Where ExecType=Trade (150=F), this trade* is handled as a private booking report; UCP keys on both sides of the trade matched. For other ExecType values, reflects the value entered on the order.</p> <p>2 = Do Not Match: Only present where ExecType=Trade (150=F) and UCP keys did not match for this trade*</p> <p>* If a trade results from an order in a multi-leg product (e.g. a spread or UDC) only the individual legs of the product will trade and can be settled. The multi-leg product does not settle. The match instruction reported for such trades has no meaning. The ExecutionReport (8) received by the user(s) for the individual leg products indicates if UCP was applied or not.</p> |
| > 1626 | MatchAttribTagID | TagNum | | <p>This tag is required by the FIX protocol when NoMatchInst > 0.</p> <p>Valid values:</p> <p>10000 = UCP Key.</p> |
| > 1627 | MatchAttribValue | String [10] | | <p>Value to apply the matching instruction. When MatchAttribTagID=10000, an integer number used for UCP - key supplied to activate Unintentional Crossing Protection (UCP).</p> |
| 432 | ExpireDate | LocalMktDate | | <p>Date of order expiration (last day the order can trade), always expressed in terms of the local market date. Reported if TimeInForce is GTD and ExpireTime is not specified.</p> |



| Tag | Name | Data Type | Reqd | Comment |
|--------|---------------------|----------------------|------|---|
| 126 | ExpireTime | UTCTimestamp | | Time/Date of order expiration (always expressed in UTC). Reported if TimeInForce is GTD and ExpireDate is not specified. |
| 58 | Text | String [see comment] | | Free format text string. The maximum number of characters may exceed 128 for complex messages. |
| 60 | TransactTime | UTCTimestamp | | Timestamp when the business transaction represented by the message occurred. |
| 555 | NoLegs | NumInGroup | | Number of InstrumentLeg repeating group instances. |
| > 600 | LegSymbol | String [255] | | Symbol of the leg. |
| > 602 | LegSecurityID | String [10] | | SecurityID of the leg. |
| > 603 | LegSecurityIDSource | String | C | Identifies class or source of the of the LegSecurityID value. Valid values: 8 = Exchange defined. Available as Tradeable Instrument ID. |
| > 1788 | LegID | String [84] | | Unique identifier assigned to this leg trade. |
| > 1366 | LegAllocID | String [10] | | Identifier assigned to a trade by ASX clearing purposes - clearing deal number. |
| > 637 | LegLastPx | Price | | Execution price assigned to a leg of a multileg instrument. |
| > 1418 | LegLastQty | Qty | | Fill quantity for the leg instrument. Formatted as per tag 38. |
| > 624 | LegSide | char | | The side of this individual leg. |



| Tag | Name | Data Type | Reqd | Comment |
|----------|----------------------------|-------------|------|--|
| | | | | Valid values: 1 = Buy 2 = Sell. |
| > 556 | LegCurrency | Currency | | Multileg instrument's currency. |
| > 685 | LegOrderQty | Qty | | Quantity ordered of this leg. |
| > 2254 | NoLegInstrumentParties | NumInGroup | | Number of parties in the repeating group. Parties involved in a leg trade. In anonymous markets, these tags are only populated when leg trade is a crossing, and contra firm will have the same value as executing firm. |
| > > 2255 | LegInstrumentPartyID | String [64] | | Identifies the party. Supplied if NoLegInstrumentParties > 0. |
| > > 2256 | LegInstrumentPartyIDSource | char | | Identifies class or source of the LegInstrumentPartyID (2255) value. Supplied if LegInstrumentPartyID is specified. Valid values: D = Proprietary/Custom code. |
| > > 2257 | LegInstrumentPartyRole | int | | The role of the party in the transaction. Required, if LegInstrumentPartyID is specified. Valid values: 1 = Executing Firm 17 = Contra Firm Additional values specified in PartyRole (452) may also be supplied. |
| | StandardTrailer | | Y | |



4.1.1. ExecutionReport (8) Examples

New Orders

```
8=FIXT.1.1|9=0000397|35=8|49=ASX|56=ABCD1|34=930|52=20161201-04:15:48.202|369=608|37=6209942839934074881|  
198=6209942839934074881|11=ID-1480565748180|453=5|448=ABC|447=D|452=1|448=ABC01|447=D|452=12|448=ABC|447=D|452=7|  
448=ASXCL|447=D|452=4|448=ABC01|447=D|452=36|17=6209942839934074881-3724|150=0|39=0|1=ABC1|581=1|55=IBZ6|48=64757|  
22=8|54=1|38=1|40=2|44=96.4|15=AUD|59=0|151=1|14=0|6=0|60=20161201-04:15:48.199|797=Y|10=252|
```

```
8=FIXT.1.1|9=0000397|35=8|49=ASX|56=ABCD1|34=931|52=20161201-04:15:52.199|369=608|37=6209942856702902273|  
198=6209942856702902273|11=ID-1480565752181|453=5|448=ABC|447=D|452=1|448=ABC01|447=D|452=12|448=ABC|447=D|452=7|  
448=ASXCL|447=D|452=4|448=ABC01|447=D|452=36|17=6209942856702902273-3725|150=0|39=0|1=ABC1|581=1|55=IBZ6|48=64757|  
22=8|54=1|38=2|40=2|44=96.4|15=AUD|59=0|151=2|14=0|6=0|60=20161201-04:15:52.197|797=Y|10=216|
```

Fills

```
8=FIXT.1.1|9=0000451|35=8|49=ASX|56=ABCD1|34=1042|52=20161201-04:43:12.212|369=719|37=6209942856702902273|  
198=6209942856702902273|11=ID-1480565752181|453=5|448=ABC|447=D|452=1|448=ABC01|447=D|452=12|448=ABC|447=D|452=7|  
448=ASXCL|447=D|452=4|448=ABC01|447=D|452=36|880=1000000020|17=6209949735411793921-B|150=F|39=2|1=ABC1|581=1|  
574=4|55=IBZ6|48=64757|22=8|54=1|38=2|40=2|44=96.4|15=AUD|59=0|1057=N|32=2|31=96.4|151=0|14=2|6=96.4|75=20161201|  
60=20161201-04:43:12.209|797=Y|10=191|
```

```
8=FIXT.1.1|9=0000451|35=8|49=ASX|56=ABCD1|34=1045|52=20161201-04:43:44.933|369=721|37=6209943024261152769|  
198=6209943024261152769|11=ID-1480565792128|453=5|448=ABC|447=D|452=1|448=ABC01|447=D|452=12|448=ABC|447=D|452=7|  
448=ASXCL|447=D|452=4|448=ABC01|447=D|452=36|880=1000000021|17=6209949872632643585-A|150=F|39=2|1=ABC1|581=1|  
574=4|55=APH7|48=58950|22=8|54=2|38=2|40=2|44=5437|15=AUD|59=0|1057=N|32=2|31=5437|151=0|14=2|6=5437|75=20161201|  
60=20161201-04:43:44.925|797=Y|10=208|
```



4.2. TradeCaptureReport (AE)

Trade Capture Report (AE) messages are used to transmit information about trades (fills).

The following should be noted:

- ClOrdID (11) is as entered on the original connection. For drop copy connections that report the activity of more than one FIX connection, these values may not be unique. OrderID (37), which is supplied by the exchange, is unique and can be used to identify the order.
- Parties block is used to communicate the entities involved and their roles within the message.
- For combination orders, each leg trade is reported in an individual message. StrategyLinkID (1851) can be used to identify all the trades for the match event.
- CopyMsgIndicator is included in all drop copy messages, and is set to Y.

| Tag | Name | Data Type | Reqd | Comment |
|-----|----------------------|-------------|------|--|
| | StandardHeader | | Y | MsgType = AE |
| 571 | TradeReportID | String [64] | | Unique identifier of trade capture report. |
| 487 | TradeReportTransType | int | Y | Identifies Trade Report message transaction type. Valid values: 0 = New 1 = Cancel (used for trade busts) |
| 568 | TradeRequestID | String [64] | | Unique Identifier for the trade request. |



| Tag | Name | Data Type | Reqd | Comment |
|-----|------------------|--------------|------|---|
| 880 | TrdMatchID | String [10] | | Identifier assigned to a trade for ASX clearing purposes - clearing deal number. For multi-leg product executions, this value is not sent to the clearing system. See individual legs for the clearing deal number for each leg. |
| 55 | Symbol | String [255] | Y | Common, human understood representation of the security. |
| 48 | SecurityID | String [10] | | Security identifier value of SecurityIDSource (22) type. |
| 22 | SecurityIDSource | String | | Identifies the source of the SecurityID (48) value. Valid values: 8 = Exchange defined. Available as Tradeable Instrument ID. |
| 32 | LastQty | Qty | | Quantity bought/sold on this (last) fill. |
| 31 | LastPx | Qty | | Price of this (last) fill. |
| 75 | TradeDate | LocalMktDate | | Business trade date. |
| 60 | TransactTime | UTCTimestamp | | Timestamp when the business transaction, represented by the message, occurred. |
| 574 | MatchType | String | | The point in the matching process at which the trade was matched. Valid values: 4 = Normal trade 5 = Auction trade S = Combo-to-outright trade |



| Tag | Name | Data Type | Reqd | Comment |
|------|--------------------|------------|------|--|
| | | | | R = Combo-to-Combo trade A = Strip to strip B = Strip to outright. |
| 570 | PreviouslyReported | Boolean | | Indicates if the trade capture report was previously reported to the counterparty. Valid values: N = Not reported to counterparty |
| 912 | LastRptRequested | Boolean | | Indicates whether this message is the last report message in response to a request message, e.g. TradeCaptureReportRequest (35=AD). Valid values: N = Not the last message Y = Last message |
| 552 | NoSides | NumInGroup | | Number of Side repeating group instances. |
| > 54 | Side | char | | Side of order. Valid values: 1 = Buy 2 = Sell. |



| Tag | Name | Data Type | Reqd | Comment |
|---------|--------------------|----------------------|------|--|
| > 29 | LastCapacity | char | | Used to indicate capacity of broker. Valid values for XSFE and NZFX: 3 = cross as principal. |
| > 1057 | AggressorIndicator | Boolean | | Used to identify whether the order initiator is an aggressor or not in the trade. Valid values: Y = Order initiator is aggressor N = Order initiator is passive. |
| > 1851 | StrategyLinkID | String [19] | | Identifies the multileg strategy (e.g. spread) to which the trade belongs. This links together trade legs executed as part of a strategy during a single match event. |
| > 453 | NoPartyIDs | NumInGroup | | Number of PartyID (448), PartyIDSource (447), and PartyRole (452) entries. |
| > > 448 | PartyID | String [see comment] | | Used to identify source of PartyID. Required if PartyIDSource is specified. Required if NoPartyIDs > 0. The maximum number of characters depends on the PartyRole (452) value. See PartyRole (452). |
| > > 447 | PartyIDSource | char | | Identifies class or source of the PartyID (448) value. Required if PartyID is specified. Valid values: D = Proprietary/Custom code. |



| Tag | Name | Data Type | Reqd | Comment |
|----------|------------------|------------|------|--|
| > > 452 | PartyRole | int | | <p>The role of the party in the transaction. Required if PartyID is specified. Maximum number of characters for each type in [].</p> <p>Valid values:</p> <ul style="list-style-type: none"> 1 = Executing Firm [64] 4 = Clearing Firm [64] 7 = Entering Firm [64] 11 = Order Origination Trader [64] 12 = Executing Trader [64] 17 = Contra Firm [64] 24 = Customer Account [15] 29 = Intermediary [64] 36 = Entering Trader [64] 45 = Secondary Account Number [32] 76 = Desk ID (Identifies the shared order group that this order is part of). [10] |
| > 1624 | NoMatchInst | NumInGroup | | <p>Number of instructions in the MatchingInstructions repeating group. For trades resulting from UCP orders, this block will be used to indicate if the trade resulted in private booking report (UCP activated) or a normal trade (UCP did not activate).</p> |
| > > 1625 | MatchInst | int | | <p>Matching instruction. Supplied if NoMatchInst > 0</p> <p>Valid values:</p> <ul style="list-style-type: none"> 1 = Match: This trade is handled as private booking report; UCP keys on both sides of the trade matched 2 = Do Not Match: UCP keys did not match for this trade. |
| > > 1626 | MatchAttribTagID | TagNum | | <p>This tag is required by the FIX protocol when NoMatchInst > 0</p> |



| Tag | Name | Data Type | Reqd | Comment |
|----------|------------------|----------------------|------|--|
| | | | | Valid values: 10000 = UCP Key. |
| > > 1627 | MatchAttribValue | String [10] | | Value to apply the matching instruction. When MatchAttribTagID=10000, an integer number used for UCP - key supplied to activate Unintentional Crossing Protection (UCP). |
| > 1 | Account | String [10] | | Account supplied on the order. |
| > 581 | AccountType | int | | Type of account associated with the order. Valid values: 1 = Customer 2 = Non-customer. |
| > 37 | OrderID | String [19] | | Unique identifier for Order as assigned by ASX. Private to the member firm entering the order. |
| > 11 | ClOrdID | String [128] | | Identifier for Order as assigned by Client. |
| > 58 | Text | String [see comment] | | Free format text string. The maximum number of characters may exceed 128 for complex messages. |
| 797 | CopyMsgIndicator | Boolean | | Indicates whether or not this message is a drop copy of another message. Always included in drop copy messages. Valid values: Y = Message is a drop copy. |
| | StandardTrailer | | Y | |



4.2.1. TradeCaptureReport (AE) Example

```
8=FIXT.1.1|9=0000441|35=AE|49=ASX|56=ABCD1|34=1051|52=20161201-04:44:53.103|369=727|571=6209608690589253633-B|
487=0|568=ABC-AD-20161201-04:44:50|912=N|880=1000000001|570=N|55=IRZ6|48=65014|22=8|32=1|31=96.4|75=20161201|
60=20161130-06:08:00.787|574=5|552=1|54=1|453=7|448=ABC|447=D|452=1|448=ABC01|447=D|452=12|448=ABC|447=D|452=7|
448=ABC|447=D|452=17|448=ASXCL|447=D|452=4|448=ABC01|447=D|452=36|1=ABC1|581=1|1057=N|37=6209606224527245313|
11=ABC01-80|29=3|797=Y|10=157|
```

```
8=FIXT.1.1|9=0000441|35=AE|49=ASX|56=ABCD1|34=1052|52=20161201-04:44:53.104|369=727|571=6209608690589253633-A|
487=0|568=ABC-AD-20161201-04:44:50|912=N|880=1000000001|570=N|55=IRZ6|48=65014|22=8|32=1|31=96.4|75=20161201|
60=20161130-06:08:00.787|574=5|552=1|54=2|453=7|448=ABC|447=D|452=1|448=ABC01|447=D|452=12|448=ABC|447=D|452=7|
448=ABC|447=D|452=17|448=ASXCL|447=D|452=4|448=ABC01|447=D|452=36|1=ABC1|581=1|1057=N|37=6209606224988618753|
11=ABC01-89|29=3|797=Y|10=191|
```

```
8=FIXT.1.1|9=0000441|35=AE|49=ASX|56=ABCD1|34=1053|52=20161201-04:44:53.104|369=727|571=6209608690589253634-B|
487=0|568=ABC-AD-20161201-04:44:50|912=N|880=1000000002|570=N|55=IRZ6|48=65014|22=8|32=1|31=96.4|75=20161201|
60=20161130-06:08:00.787|574=5|552=1|54=1|453=7|448=ABC|447=D|452=1|448=ABC01|447=D|452=12|448=ABC|447=D|452=7|
448=ABC|447=D|452=17|448=ASXCL|447=D|452=4|448=ABC01|447=D|452=36|1=ABC1|581=1|1057=N|37=6209606224527245313|
11=ABC01-80|29=3|797=Y|10=162|
```



4.3. PartyRiskLimitsReport (CM)

There is a preconfigured warning threshold for accounts related to Pre-Trade Risk Management (PTRM) limits.

The Party Risk Limits Report message is used to inform subscribers that the threshold has been exceeded for their PTRM limits. This can be sent at an account or firm level. Access to receive this message may be limited by the permissions set for the subscriber.

A PartyRiskLimitsReport (CM) message is sent for every order that breaches a PTRM threshold. If an order simultaneously breaches the lower and upper threshold, only one message is sent. Similarly, if a spread order breaches both the long and short limits, only one message, notifying of the long breach, will be sent. The message will contain both the actual utilisation and the upper limit threshold value. If an order breaches the PTRM limit, the order will be rejected, and a PartyRiskLimitsReport (CM) message will not be sent.

The lower limit is set at 75%, the upper one at 90%.

| Tag | Name | Data Type | Reqd | Comment |
|----------|--------------------|----------------------|------|--|
| | StandardHeader | | Y | MsgType = CM |
| 1667 | RiskLimitReportID | String [128] | Y | Identifier for the PartyRiskLimitsReport. |
| 1677 | NoPartyRisksLimits | NumInGroup | | Number of party risk limits. |
| > 1671 | NoPartyDetails | NumInGroup | | Number of parties that this limit applies to. Required if NoPartyRiskLimits > 0. |
| > > 1691 | PartyDetailID | String [see comment] | | Identifies the party. Required if NoPartyDetails > 0. The maximum number of characters depends on the PartyDetailRole (1692) value. See PartyDetailRole (1692). |



| Tag | Name | Data Type | Reqd | Comment |
|------------|-----------------------------|------------|------|--|
| > > 1692 | PartyDetailIDSource | char | | Identifies the source of the PartyDetailID value. Required when NoPartyRiskLimits > 0. Valid values: D = Proprietary/Custom code. |
| > > 1693 | PartyDetailRole | int | | Identifies the role of the party. Required when NoPartyRiskLimits > 0. Valid values: 1 = Executing firm. Up to 64 characters. 24 = Account (Account (1) value entered on the order when the risk applies to the account. Up to 10 characters.) |
| > 1669 | NoRiskLimits | NumInGroup | | Number of risk limits. |
| > > 1529 | NoRiskLimitTypes | NumInGroup | | Number of risk limits and associated warnings. |
| > > > 1530 | RiskLimitType | int | | Used to specify the type of risk limit. Required, if NoRiskLimitTypes > 0. Valid values: 4 = Long limit 5 = Short limit. |
| > > > 1765 | RiskLimitUtilizationPercent | Percentage | | Percentage of utilisation of a party's set risk limit. |

| Tag | Name | Data Type | Reqd | Comment |
|--------------|---------------------------------|--------------|------|---|
| > > > 1767 | RiskLimitAction | int | | Risk protection action. Valid values: 4 = Warning |
| > > > 1559 | NoRiskWarningLevel | NumInGroup | | Number of risk warning levels. |
| > > > > 1769 | RiskWarningLevelAction | int | | Action to be taken when warning level is breached. Valid values: 4 = Warning. |
| > > > > 1560 | RiskWarningLevelPercent | Percentage | | Percent of risk limit at which a warning is issued. |
| > > > 1534 | NoRiskInstrumentScopes | NumInGroup | | Number of instruments the risk limit applies to. |
| > > > > 1535 | InstrumentScopeOperator | int | | Specifies the instruments included in the limit. Valid values: 1 = Include. |
| > > > > 1545 | InstrumentScopeSecurityGroup | String [128] | | Commodity code of securities that the risk limit applied to, e.g. XT. |
| > > > > 1616 | InstrumentScopeSecurityExchange | Exchange | | SecurityExchange the limit applies to. Valid values: XSFE = Sydney Futures Exchange NZFX = New Zealand Futures and Options Exchange. |
| 60 | TransactTime | UTCTimestamp | | Timestamp when the business transaction, represented by the message, occurred. |

| Tag | Name | Data Type | Reqd | Comment |
|-----|-----------------|----------------------|------|--|
| 58 | Text | String [see comment] | | Text string describing warning. The maximum number of characters may exceed 128 for complex error messages. |
| | StandardTrailer | | Y | As defined in standard trailer. |

4.3.1. PartyRiskLimitReport (CM) Example

```
8=FIXT.1.1|9=0000301|35=CM|1128=9|49=ASX|56=ABCD1|34=1401|52=20161201-05:18:25.663|369=864|
1667=1262606_256_ABCD1_7|1677=1|1671=1|1691=ABC1|1692=D|1693=24|1669=1|1529=1|1530=4|1767=4|1765=0.79|1559=1|
1769=4|1560=0.75|1534=1|1535=1|1545=AP-S_SYMB|60=20161201-05:18:25.660|58=ABC1 exceeds 75.00%. Actual utilization
78.60%.|10=012|
```



4.4. TradeCaptureReportRequest (AD)

Drop copy connections provide the ability to request trades from previous days. This is done with the TradeCaptureReportRequest (AD) message. Trades are returned in TradeCaptureReport (AE) messages. If the request cannot be satisfied, a TradeCaptureReportRequestAck (AQ) message will be returned indicating the reason the request could not be honoured.

| Tag | Name | Data Type | Reqd | Comment |
|-----|------------------|--------------|------|---|
| | StandardHeader | | Y | MsgType = AD |
| 568 | TradeRequestID | String [64] | Y | Unique identifier for the trade capture report request. |
| 569 | TradeRequestType | int | Y | Type of trade capture report requested. Valid values: 0 = All Trades. |
| 55 | Symbol | String [255] | | Common, human understood representation of the security. Omit Symbol (55) to request trades in all instruments. Set to [N/A] if specifying instrument using SecurityID (48). |
| 48 | SecurityID | String [10] | | Security identifier value of SecurityIDSource (22) type. Requires SecurityIDSource (22). Request will be rejected if SecurityID (48) is present and Symbol (55) is not [N/A]. |
| 22 | SecurityIDSource | String | | Identifies the source of the SecurityID (48) value. Required if SecurityID (48) is specified. Valid values: 8 = Exchange defined. Available as Tradeable Instrument ID. |



| Tag | Name | Data Type | Reqd | Comment |
|------|-----------------|--------------|------|--|
| 580 | NoDates | NumInGroup | | Number of dates to report on. Up to two groups can be specified. First group controls when trades are to be reported from. Second group controls when trades are to be reported to. |
| > 75 | TradeDate | LocalMktDate | C | Business Trade Date of trade report. In the first group: First Business Trade Date to report trades from. In the second group: Last Business Trade Date to report trades until. Required when NoDates > 0. Value is ignored if TransactTime (60) is supplied. |
| > 60 | TransactTime | UTCTimestamp | | Time trade occurred. In the first group: Earliest time of trade to be returned. In the second group: Last time of trade to be returned. If TransactTime (60) is supplied, TradeDate (75) will be ignored. TradeDate (75) must be present to define the repeating group instance. |
| | StandardTrailer | | Y | |

4.4.1. TradeCaptureReportRequest (AD) Example

```
8=FIXT.1.1|9=103|35=AD|49=ABCD1|56=ASX|34=727|52=20161201-04:44:50|568=ABC-AD-20161201-04:44:50|569=0|580=1|75=20161201|10=003|
```



4.5. TradeCaptureReportRequestAck (AQ)

In the Trade Capture Report, the ack will be sent in the following circumstances:

- To indicate a successful request for which there are no trades to return
- If a request cannot be satisfied, to notify the user why it cannot be met.

| Tag | Name | Data Type | Reqd | Comment |
|-----|--------------------|-------------|------|--|
| | StandardHeader | | Y | MsgType = AQ |
| 568 | TradeRequestID | String [64] | Y | Identifier of the trade capture report request. |
| 569 | TradeRequestType | int | Y | Type of trade capture report requested. Valid values: 0 = All Trades. |
| 748 | TotNumTradeReports | int | | Total number of trade reports returned. |
| 749 | TradeRequestResult | int | Y | Result of Trade Request Valid values: 1 = Invalid or Unknown Instrument 0 = Successful 8 = Type not supported 99 = Other. |



| Tag | Name | Data Type | Reqd | Comment |
|-----|--------------------|----------------------|------|--|
| 750 | TradeRequestStatus | int | Y | Status of Trade Request. Valid values: 1 = Completed 2 = Rejected. |
| 55 | Symbol | String [255] | | Common, human understood representation of the security. |
| 58 | Text | String [see comment] | | Text describing the reason for rejection. The maximum number of characters may exceed 128 for complex error messages. |
| | StandardTrailer | | Y | |

4.5.1. TradeCaptureReportRequestAck (AQ) Examples

No records returned

8=FIXT.1.1|9=0000125|35=AQ|49=ASX|56=ABCD1|34=1189|52=20161201-04:46:12.499|369=734|568=ABC-AD-20161201-04:46:12|569=0|748=0|749=0|750=1|55=[N/A]|10=002|

Invalid symbol on request

8=FIXT.1.1|9=112|35=AD|49=ABCD1|56=ASX|34=797|52=20161201-05:01:39|568=ABC-AD-20161201-05:01:39|569=0|580=1|75=20161201|55=IRZ67|10=022|

8=FIXT.1.1|9=0000119|35=AQ|49=ASX|56=ABCD1|34=1252|52=20161201-05:01:39.485|369=797|568=ABC-AD-20161201-05:01:39|569=0|749=1|750=2|55=[N/A]|10=243|



4.6. QuoteRequest (R)

QuoteRequest (R) messages provide information on accepted RFQs. Details of the user who entered the QuoteRequest (R) are in the RootParties block.

QuoteReqID (131) is the identifier entered by the user and therefore duplicates may occur if different users use the same identifiers.

| Tag | Name | Data Type | Reqd | Comment |
|--------|-------------------|----------------------|------|--|
| | StandardHeader | | Y | MsgType = R |
| 131 | QuoteReqID | String [64] | Y | Identifier of QuoteRequest (R) entered by the FIX user. [N/A] if quote was created on the ASX Trading Terminal. |
| 1116 | NoRootPartyIDs | NumInGroup | | Number of parties that this quote request applies to. |
| > 1117 | RootPartyID | String [see comment] | | Identifies the party Required if NoRootPartyIDs > 0 The maximum number of characters depends on the RootPartyRole (1119) value. See RootPartyRole (1119). |
| > 1118 | RootPartyIDSource | char | | Identifies the source of the RootPartyID value. Required when NoRootPartyIDs > 0 Valid values: D = Proprietary/Custom code |
| > 1119 | RootPartyRole | int | | Identifies the role of the party. Maximum number of characters for each type in []. Required when NoRootPartyIDs > 0 Valid values: 7 = Entering firm [64] |



| Tag | Name | Data Type | Reqd | Comment |
|------|------------------|--------------|------|---|
| | | | | 36 = Entering trader [64] |
| 146 | NoRelatedSym | NumInGroup | Y | Number of related symbols (instruments) in this request. |
| > 55 | Symbol | String [255] | | Common, human understood representation of the security. |
| > 48 | SecurityID | String [10] | | Security identifier value of SecurityIDSource (22) type. |
| > 22 | SecurityIDSource | String | | Identifies the source of the SecurityID (48) value. Valid values: 8 = Exchange defined. Available as Tradeable Instrument ID. |
| > 54 | Side | char | | Side of order. If Side is omitted, indicates a two sided quote. Valid values: 1 = Buy 2 = Sell 8 = Crossing. |
| > 38 | OrderQty | Qty | | Total quantity |
| > 60 | TransactTime | UTCTimestamp | | Timestamp when the quote entered by the user was accepted by the matching engine. |
| | StandardTrailer | | Y | |

4.6.1. QuoteRequest (R) Example

8=FIXT.1.1|9=0000193|35=R|49=ASX|56=ABCD1|34=211|52=20170605-02:17:16.327|369=208|131=QR-174|1116=2|1117=ABC|



1118=D | 1119=7 | 1117=ABC01 | 1118=D | 1119=36 | 146=1 | 55=ARH8 | 48=92719 | 22=8 | 54=1 | 38=326 | 60=20170605-02:17:16.325 | 10=101 |



5. General Messages

The following sections cover the supported general messages.

5.1. News (B)

The News (B) message is used to disseminate text information to subscribers.

| Tag | Name | Data Type | Reqd | Comment |
|------|-----------------|----------------------|------|--|
| | StandardHeader | | Y | MsgType = B |
| 148 | Headline | String [see comment] | Y | Description of information being transmitted. The maximum number of characters may exceed 128 for complex messages. |
| 42 | Orig Time | UTCTimestamp | Y | Time of message origination. |
| 33 | NoLinesOfText | NumInGroup | Y | Number of Test (58) repeating group instances. |
| > 58 | Text | String [see comment] | Y | Detailed description, or repetition of Headline (148) if no additional information to be transmitted. The maximum number of characters may exceed 128 for complex messages. |
| | StandardTrailer | | Y | |



5.2. BusinessMessageReject (j)

The BusinessMessageReject message can reject an application-level message, which fulfills session-level rules and cannot be rejected via any other means; typically unsupported application messages or application messages lacking a specific reject message. If the message fails, a session-level rule (for example, body length is incorrect), a session-level Reject message should be issued.

| Tag | Name | Data Type | Reqd | Comment |
|-----|----------------------|----------------------|------|--|
| | StandardHeader | | Y | MsgType = j (lowercase) |
| 45 | RefSeqNum | SeqNum | | MsgSeqNum of rejected message. |
| 372 | RefMsgType | String | Y | The MsgType of the FIX message being referenced. |
| 380 | BusinessRejectReason | int | Y | Code to identify reason for a Business Message Reject message. Valid values: 3 = Unsupported Message Type 4 = Application not available |
| 58 | Text | String [see comment] | | Where possible, message to explain reason for rejection. The maximum number of characters may exceed 128 for complex error messages. |
| | StandardTrailer | | Y | |

5.2.1. BusinessMessageReject (j) Example

```
8=FIXT.1.1|9=0000109|35=j|49=ASX|56=ABCD1|34=1263|52=20161201-05:04:20.089|369=807|45=808|372=D|380=3|58=Unsupported Message Type|10=244|
```



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