Nasdaq OUCH

Nasdaq OUCH 5.0

Order Entry Specification

The NASDAQ Group, Inc

OUCH is a simple protocol that allows NASDAQ participants to enter, replace, and cancel orders and receive executions. It is intended to allow participants and their software developers to integrate NASDAQ into their proprietary trading systems or to build custom front ends.

Contents

1 Message Set Overview

1.1 List of Messages

The following table lists all messages described in this report.

Name	Category	Description
AccountQueryRequest	AccountReporting	The Account Query Request message can be used when recovering state to request the next available UserRefNum that can be used for identifying new transactions.
AccountQueryResponse	AccountReporting	The Account Query Response message in sent in response to an Account Query Request to indicate the next available UserRefNum that can be used to identify new transactions.
MassCancelRequest	OrderMassHandling	The Mass Cancel Request message allows firms to initiate the cancellation of one or more orders that are currently booked at the exchange if they match the criteria specified in the request. If no optional criteria are specified then all orders for the specified firm on the account will be cancelled. Optional criteria can be specified in the Appendage field using the tags described below.
MassCancelResponse	OrderMassHandling	This message acknowledges the receipt of a valid Mass Cancel Request message. The data fields from the Mass Cancel Request message are echoed back in this message.
AIQCanceled	SingleGeneralOrderHandling	
BrokenTrade	SingleGeneralOrderHandling	A Broken Trade Message informs you that an execution has been broken. The trade is no longer good and will not clear. The reason for the break is given.

Name	Category	Description
CancelOrderRequest	SingleGeneralOrderHandling	The Cancel Order Message is used to request that an order be canceled or reduced. In the Cancel Order Message, you must specify the new "intended order size" for the order. The "intended order size" is the maximum number of shares that can be executed in total after the cancel is applied.
CancelPending	SingleGeneralOrderHandling	A Cancel Pending Message is sent in response to a cancel request for a cross order during a pre-cross late period signifying that it cannot be canceled at this time, but any unexecuted portion of this order will automatically be canceled immediately after the cross completes.
CancelReject	SingleGeneralOrderHandling	A Cancel Reject Message is sent in response to a partial cancel request (with non-zero "intended order size") for a cross order during a pre-cross late period signifying that it cannot be partially canceled at this time. No automatic cancel will be scheduled for this order. Clients could repeat their request for any unexecuted portion of the order after the cross completes.
DisableOrderEntryRequest	SingleGeneralOrderHandling	The Disable Order Entry Request allows firms the ability to initiate the following requests to block submissions of new orders on a particular account.
DisableOrderEntryResponse	SingleGeneralOrderHandling	This message acknowledges the receipt of the Disable Order Entry Request message. The data fields from the Enter Order Message are echoed back in this message.
EnableOrderEntryRequest	SingleGeneralOrderHandling	The Enable Order Entry Request allows firms the ability to initiate the following requests to unblock submission of new orders on a particular account.
EnableOrderEntryResponse	SingleGeneralOrderHandling	This message acknowledges the receipt of the Enable Order Entry Request message. The data fields from the Enable Order Entry Request message are echoed back in this message.

Name	Category	Description
EnterOrder	SingleGeneralOrderHandling	
ModifyOrderRequest	SingleGeneralOrderHandling	The Modify Order Message is used to request modifications that will not affect order priority on the book. Since priority of the order does not change (exception noted), allowed modifications are restricted to only the ones specified in the message details below. Increasing share amount is not allowed and requests to do so will be ignored.
OrderAccepted	SingleGeneralOrderHandling	This message acknowledges the receipt and acceptance of a valid Enter Order Message. The data fields from the Enter Order Message are echoed back in this message. Note that the accepted values may differ from the entered values for some fields.
OrderCanceled	SingleGeneralOrderHandling	A Canceled Message informs you that an order has been reduced or canceled. This could be acknowledging a Cancel Order Message, or it could be the result of the order timing out or being canceled automatically.
OrderExecuted	SingleGeneralOrderHandling	An Executed Order Message informs you that all or part of an order has been executed.
OrderModified	SingleGeneralOrderHandling	An Order Modified Message is sent in response to an order modify request.
OrderPriorityUpdate	SingleGeneralOrderHandling	A Priority Update Message is sent whenever priority of the order has been changed by the system.
OrderReplaced	SingleGeneralOrderHandling	This message acknowledges the receipt and acceptance of a valid Replace Order Message. The data fields from the Replace Order Message are echoed back in this message. Note that the accepted values may differ from the entered values for some fields. You will receive one and only one of these two for each replacement.

Name	Category	Description
OrderRestated	SingleGeneralOrderHandling	The Order Restated Message is sent to indicate that the system has modified an order as part of its order management.
Rejected	SingleGeneralOrderHandling	A Rejected Message may be sent in response to an Enter Order Message or Replace Order Message if the order or replace cannot be accepted at this time. The reason for the rejection is given.
ReplaceOrderRequest	SingleGeneralOrderHandling	The Replace Order Message allows you to alter most of the attributes of an order in a single message. This is more efficient than canceling an existing order and immediately succeeding it with a new order. Replacing an order always gives it a new timestamp for its time priority on the book. If you wish you simply partially cancel an order and retain its time priority, send a Cancel Order Message instead.
SystemEvent	SingleGeneralOrderHandling	System Event Messages signal events that affect the entire NASDAQ system.

2 AIQCanceled

Category: SingleGeneralOrderHandling

2.1 Message Functionality

The message usage documentation for AIQCanceled

2.2 Structure

Name	Mult.	Type	Description
Type	[0..1]	CodeSet	Canceled Order Message.
Timestamp	[1..1]	Timestamp	Expressed as nanoseconds since midnight.
UserRefNum	[1..1]	UserRefNum	The UserRefNum of the order being reduced.
DecrementShares	[1..1]	Numeric	The number of shares just decremented from the order. This number is incremental, not cumulative.
OrderCancelReason	[0..1]	CodeSet	Reason the order was reduced or canceled. For an AIQ Cancel message, this value will always be "Q".
QuantityPreventedFromTrading	[1..1]	Integer	Shares that would have executed if the trade would have occurred. Depending on AIQ type and the sizes of orders in question the value for this field could either be the same or different than the Decrement Shares field. For "Decrement both" they are always the same. For "Cancel oldest" they will be different if the incoming order is smaller than the resting order.
ExecutionPrice	[1..1]	Price	Price at which the trade would have occurred.
LiquidityFlag	[1..1]	CodeSet	Liquidity flag the order would have received.
AIQStrategy	[1..1]	Alpha	AIQ strategy used on the cancelled order.
AppendageLength	[1..1]	Integer	The length of the remaining Optional Appendage field.
OptionalAppendage	[1..1]	TagValue	The available options supported on this message are: UserRefIdx

3 AccountQueryRequest

Category: AccountReporting

3.1 Message Functionality

The Account Query Request message can be used when recovering state to request the next available UserRefNum that can be used for identifying new transactions.

3.2 Structure

Name	Mult.	Type	Description
Type	[0..1]	CodeSet	Account Query Request Message.
AppendageLength	[1..1]	Integer	The length of the remaining Optional Appendage field.
OptionalAppendage	[1..1]	TagValue	The available options supported on this message are: UserRefIdx

4 AccountQueryResponse

Category: AccountReporting

4.1 Message Functionality

The Account Query Response message in sent in response to an Account Query Request to indicate the next available UserRefNum that can be used to identify new transactions.

4.2 Structure

Name	Mult.	Type	Description
Type	[0..1]	CodeSet	Account Query Response Message.
Timestamp	[1..1]	Timestamp	Expressed as nanoseconds since midnight.
NextUserRefNum	[1..1]	UserRefNum	The next available UserRefNum.
AppendageLength	[1..1]	Integer	The length of the remaining Optional Appendage field.
OptionalAppendage	[1..1]	TagValue	The available options supported on this message are: UserRefIdx

5 BrokenTrade

Category: SingleGeneralOrderHandling

5.1 Message Functionality

A Broken Trade Message informs you that an execution has been broken. The trade is no longer good and will not clear. The reason for the break is given.

You will always get an Executed Order Message prior to getting a Broken Trade Message for a given execution.

5.2 Structure

Name	Mult.	Type	Description
Type	[0..1]	CodeSet	Broken Trade Message.
Timestamp	[1..1]	Timestamp	Expressed as nanoseconds since midnight.
UserRefNum	[1..1]	UserRefNum	The UserRefNum of the order whose execution corresponding to given Match Number is being broken.
MatchNumber	[1..1]	Numeric	Match Number as transmitted in the Executed Order Message being broken.
BrokenTradeReason	[1..1]	CodeSet	The reason the trade was broken. The values currently supported are: E = Erroneous (trade deemed clearly erroneous) C = Consent (both parties agreed to break the trade) S = Supervisory (manually broken by supervisory) X = External (trade broken by an external third party)
ClOrdID	[1..1]	Alpha	Customer order identifier.
AppendageLength	[1..1]	Integer	The length of the remaining Optional Appendage field.
OptionalAppendage	[1..1]	TagValue	The available options supported on this message are: UserRefIdx

6 CancelOrderRequest

Category: SingleGeneralOrderHandling

6.1 Message Functionality

The Cancel Order Message is used to request that an order be canceled or reduced. In the Cancel Order Message, you must specify the new "intended order size" for the order. The "intended order size" is the maximum number of shares that can be executed in total after the cancel is applied.

To cancel the entire balance of an order, you would enter a Cancel Order Message with a Shares field of zero.

Note that the only acknowledgement to a Cancel Order Message is the resulting Canceled Order Message. There is no "too late to cancel" message since by the time you received it, you would already have gotten the execution. Superfluous Cancel Order Messages are silently ignored.

6.2 Structure

Name	Mult.	Type	Description
Type	[0..1]	CodeSet	Cancel Order Message.
UserRefNum	[1..1]	UserRefNum	The Order UserRefNum as was originally transmitted in an Enter Order Message.
Quantity	[1..1]	Integer	This is the new intended order size. This limits the maximum number of shares that can potentially be executed in total after the cancel is applied. Entering a zero here will cancel any remaining open shares on this order.
AppendageLength	[1..1]	Integer	The length of the remaining Optional Appendage field.
OptionalAppendage	[1..1]	TagValue	The available options supported on this message are: UserRefIdx

7 CancelPending

Category: SingleGeneralOrderHandling

7.1 Message Functionality

A Cancel Pending Message is sent in response to a cancel request for a cross order during a pre-cross late period signifying that it cannot be canceled at this time, but any unexecuted portion of this order will automatically be canceled immediately after the cross completes.

This message will only be sent once for a given UserRefNum. Duplicate cancel requests for the same UserRefNum will be ignored by OUCH.

7.2 Structure

Name	Mult.	Type	Description
Type	[0..1]	CodeSet	Cancel Pending Message.
Timestamp	[1..1]	Timestamp	Expressed as nanoseconds since midnight.
UserRefNum	[1..1]	UserRefNum	The UserRefNum of the order suffering the pending cancel.
AppendageLength	[1..1]	Integer	The length of the remaining Optional Appendage field.
OptionalAppendage	[1..1]	TagValue	The available options supported on this message are: UserRefIdx

8 CancelReject

Category: SingleGeneralOrderHandling

8.1 Message Functionality

A Cancel Reject Message is sent in response to a partial cancel request (with non-zero "intended order size") for a cross order during a pre-cross late period signifying that it cannot be partially canceled at this time. No automatic cancel will be scheduled for this order. Clients could repeat their request for any unexecuted portion of the order after the cross completes.

This message will only be sent once for a given UserRefNum. Duplicate cancel requests for the same UserRefNum will be ignored by OUCH.

8.2 Structure

Name	Mult.	Type	Description
Type	[0..1]	CodeSet	Cancel Reject Message.
Timestamp	[1..1]	Timestamp	Expressed as nanoseconds since midnight.
UserRefNum	[1..1]	UserRefNum	The UserRefNum of the order that was cancel-rejected.
AppendageLength	[1..1]	Integer	The length of the remaining Optional Appendage field.
OptionalAppendage	[1..1]	TagValue	The available options supported on this message are: UserRefIdx

9 DisableOrderEntryRequest

Category: SingleGeneralOrderHandling

9.1 Message Functionality

The Disable Order Entry Request allows firms the ability to initiate the following requests to block submissions of new orders on a particular account.

9.2 Structure

Name	Mult.	Type	Description
Type	[0..1]	CodeSet	Identifies this message as a Disable Order Entry Request message type.
UserRefNum	[1..1]	UserRefNum	User Reference Numbers must be day-unique and strictly increasing for each Order Port.
Firm	[1..1]	Alpha	This field should contain all caps. Firm identifier for the order entry firm. One logical OUCH account can potentially enter orders for multiple firms in a Service Bureau configuration.
AppendageLength	[1..1]	Integer	The length of the remaining Optional Appendage field.
OptionalAppendage	[1..1]	TagValue	The available options supported on this message are: UserRefIdx

10 DisableOrderEntryResponse

Category: SingleGeneralOrderHandling

10.1 Message Functionality

This message acknowledges the receipt of the Disable Order Entry Request message. The data fields from the Enter Order Message are echoed back in this message.

10.2 Structure

Name	Mult.	Type	Description
Type	[0..1]	CodeSet	Identifies this message as a Disable Order Entry Request message type.
Timestamp	[1..1]	Timestamp	Expressed as nanoseconds since midnight.
UserRefNum	[1..1]	UserRefNum	The UserRefNum from the inbound message.
Firm	[1..1]	Alpha	This field should contain all caps. Firm identifier for the order entry firm. One logical OUCH account can potentially enter orders for multiple firms in a Service Bureau configuration.
AppendageLength	[1..1]	Integer	The length of the remaining Optional Appendage field.
OptionalAppendage	[1..1]	TagValue	The available options supported on this message are: UserRefIdx

11 EnableOrderEntryRequest

Category: SingleGeneralOrderHandling

11.1 Message Functionality

The Enable Order Entry Request allows firms the ability to initiate the following requests to unblock submission of new orders on a particular account.

11.2 Structure

Name	Mult.	Type	Description
Type	[0..1]	CodeSet	Identifies this message as a Enable Order Entry Request message type.
UserRefNum	[1..1]	UserRefNum	User Reference Numbers must be day-unique and strictly increasing for each Order Port.
Firm	[1..1]	Alpha	This field should contain all caps. Firm identifier for the order entry firm. One logical OUCH account can potentially enter orders for multiple firms in a Service Bureau configuration.
AppendageLength	[1..1]	Integer	The length of the remaining Optional Appendage field.
OptionalAppendage	[1..1]	TagValue	The available options supported on this message are: UserRefIdx

12 EnableOrderEntryResponse

Category: SingleGeneralOrderHandling

12.1 Message Functionality

This message acknowledges the receipt of the Enable Order Entry Request message. The data fields from the Enable Order Entry Request message are echoed back in this message.

12.2 Structure

Name	Mult.	Type	Description
Type	[0..1]	CodeSet	Identifies this message as a Disable Order Entry Request message type.
Timestamp	[1..1]	Timestamp	Expressed as nanoseconds since midnight.
UserRefNum	[1..1]	UserRefNum	The UserRefNum from the inbound message.
Firm	[1..1]	Alpha	This field should contain all caps. Firm identifier for the order entry firm. One logical OUCH account can potentially enter orders for multiple firms in a Service Bureau configuration.
AppendageLength	[1..1]	Integer	The length of the remaining Optional Appendage field.
OptionalAppendage	[1..1]	TagValue	The available options supported on this message are: UserRefIdx

13 EnterOrder

Category: SingleGeneralOrderHandling

13.1 Message Functionality

The message usage documentation for EnterOrder

13.2 Structure

Name	Mult.	Type	Description
Type	[0..1]	CodeSet	Identifies this message as Enter Order Message type.
UserRefNum	[1..1]	UserRefNum	UserRefNum must be day-unique and strictly increasing for each OUCH account.
Side	[1..1]	CodeSet	B = buy S = sell T = sell short E = sell short exempt
Quantity	[1..1]	Integer	Total number of shares. Must be greater than zero and less than 1,000,000.
Symbol	[1..1]	Alpha	Stock Symbol.
Price	[1..1]	Price	The price of the order. Please refer to the Data Types section for more clarification.
TimeInForce	[1..1]	CodeSet	Corresponds to TimeInForce (59) in Nasdaq FIX. 0 = Day (Market Hours) 3 = IOC 5 = GTX (Extended Hours) 6 = GTT (ExpireTime needs to be specified) E = After hours
Display	[1..1]	CodeSet	Y = visible N = hidden A = attributable
Capacity	[1..1]	CodeSet	A = agency P = principal R = riskless O = other
InterMarketSweepEligibility	[1..1]	CodeSet	Y = eligible N = not eligible
CrossType	[1..1]	CodeSet	N = continuous market O = opening cross (Nasdaq only) C = closing cross (Nasdaq only) H = halt/IPO (Nasdaq only) S = supplemental (Nasdaq only) R = retail (BX only) E = extended life (Nasdaq only) A = after hours close (Nasdaq only)
ClOrdID	[1..1]	Alpha	Customer order identifier. ClOrdID will not be checked for day-uniqueness for each OUCH account.
AppendageLength	[1..1]	Integer	The length of the remaining Optional Appendage field.

Name	Mult.	Type	Description
OptionalAppendage	[1..1]	TagValue	The available options supported on this message are: Firm MinQty CustomerType MaxFloor PriceType PegOffset Discretion DiscretionPrice DiscretionPriceType DiscretionPegOffset PostOnly RandomReserves Route ExpireTime TradeNow HandleInst GroupID SharesLocated UserRefIdx

14 MassCancelRequest

Category: OrderMassHandling

14.1 Message Functionality

The Mass Cancel Request message allows firms to initiate the cancellation of one or more orders that are currently booked at the exchange if they match the criteria specified in the request. If no optional criteria are specified then all orders for the specified firm on the account will be cancelled. Optional criteria can be specified in the Appendage field using the tags described below.

14.2 Structure

Name	Mult.	Type	Description
Type	[0..1]	CodeSet	Identifies this message as a Mass Cancel Request message type.
UserRefNum	[1..1]	UserRefNum	User Reference Numbers must be day-unique and strictly increasing for each Order Port.
Firm	[1..1]	Alpha	This field should contain all caps. Firm identifier for the order entry firm. One logical OUCH account can potentially enter orders for multiple firms in a Service Bureau configuration.
Symbol	[1..1]	Alpha	**Presence = Optional**Optional, Space filled if not specified Symbol to mass cancel orders on.
AppendageLength	[1..1]	Integer	Length of entire optional appendage. Zero (0) if no appendage follows.
OptionalAppendage	[1..1]	TagValue	The available options supported on this message are: Side GroupID UserRefIdx

15 MassCancelResponse

Category: OrderMassHandling

15.1 Message Functionality

This message acknowledges the receipt of a valid Mass Cancel Request message. The data fields from the Mass Cancel Request message are echoed back in this message.

15.2 Structure

Name	Mult.	Type	Description
Type	[0..1]	CodeSet	Identifies this message as a Mass Cancel Request message type.
Timestamp	[1..1]	Timestamp	Expressed as nanoseconds since midnight.
UserRefNum	[1..1]	UserRefNum	The UserRefNum from the inbound message.
Firm	[1..1]	Alpha	This field should contain all caps. Firm identifier for the order entry firm. One logical OUCH account can potentially enter orders for multiple firms in a Service Bureau configuration.
Symbol	[1..1]	Alpha	**Presence = Optional**Optional, Space filled if not specified. Symbol to mass cancel orders on.
AppendageLength	[1..1]	Integer	Length of entire optional appendage. Zero (0) if no appendage follows.
OptionalAppendage	[1..1]	TagValue	The available options supported on this message are: Side GroupID UserRefIdx

16 ModifyOrderRequest

Category: SingleGeneralOrderHandling

16.1 Message Functionality

The Modify Order Message is used to request modifications that will not affect order priority on the book. Since priority of the order does not change (exception noted), allowed modifications are restricted to only the ones specified in the message details below. Increasing share amount is not allowed and requests to do so will be ignored.

16.2 Structure

Name	Mult.	Type	Description
Type	[0..1]	CodeSet	Modify Order Message.
UserRefNum	[1..1]	UserRefNum	The Order UserRefNum as was originally transmitted in an Enter Order Message.
Side	[1..1]	CodeSet	The new side to be associated with the order. B = buy S = sell T = sell short E = sell short exempt Only the following modifications are allowed: S <-> E S <-> T E <-> T
Quantity	[1..1]	Integer	This is the new intended order size. This limits the maximum number of shares that can potentially be executed in total after the cancel is applied. Entering a zero here will cancel any remaining open shares on this order.
AppendageLength	[1..1]	Integer	The length of the remaining Optional Appendage field.
OptionalAppendage	[1..1]	TagValue	The available options supported on this message are: UserRefIdx

17 OrderAccepted

Category: SingleGeneralOrderHandling

17.1 Message Functionality

This message acknowledges the receipt and acceptance of a valid Enter Order Message. The data fields from the Enter Order Message are echoed back in this message. Note that the accepted values may differ from the entered values for some fields.

Accepted Messages normally come before any Executed Messages or Canceled Messages for an order. However, when the Order State field of an Accepted Message is Order Dead ("D"), no additional messages will be received for that order, as Order Dead means that the order was accepted and automatically canceled.

17.2 Structure

Name	Mult.	Type	Description
Type	[0..1]	CodeSet	Accepted Message Identifier.
Timestamp	[1..1]	Timestamp	Expressed as nanoseconds since midnight.
UserRefNum	[1..1]	UserRefNum	The order UserRefNum as entered.
Side	[1..1]	CodeSet	The side as entered.
Quantity	[1..1]	Integer	Total number of shares accepted.
Symbol	[1..1]	Alpha	Stock symbol as entered.
Price	[1..1]	Price	The accepted price of the order. Please note that the accepted price could potentially be different than the entered price if the order was re-priced by the exchange on entry. The accepted price will always be better than or equal to the entered price.
TimeInForce	[1..1]	CodeSet	The accepted Time in Force of the order. Please note that the accepted Time in Force may potentially be different than the entered Time in Force. The accepted Time in Force will always be equal to or shorter in scope than the entered Time in Force.
Display	[1..1]	CodeSet	Y = visible N = hidden A = attributable Z = conformant

Name	Mult.	Type	Description
OrderReferenceNumber	[1..1]	Numeric	The day-unique Order Reference Number assigned by NASDAQ to this order.
Capacity	[1..1]	CodeSet	The capacity specified on the order.
InterMarketSweepEligibility	[1..1]	CodeSet	Y = eligible N = not eligible
CrossType	[1..1]	CodeSet	The cross type as entered.
OrderState	[1..1]	CodeSet	L = Order Live D = Order Dead
ClOrdID	[1..1]	Alpha	Customer order identifier.
AppendageLength	[1..1]	Integer	The length of the remaining Optional Appendage field.
OptionalAppendage	[1..1]	TagValue	The available options supported on this message are: Firm MinQty CustomerType MaxFloor PriceType PegOffset Discretion DiscretionPrice DiscretionPegType DiscretionPegOffset PostOnly RandomReserves Route ExpireTime TradeNow HandleInst BBOWeightIndicator GroupID SharesLocated UserRefIdx

18 OrderCanceled

Category: SingleGeneralOrderHandling

18.1 Message Functionality

A Canceled Message informs you that an order has been reduced or canceled. This could be acknowledging a Cancel Order Message, or it could be the result of the order timing out or being canceled automatically.

Please note that a Canceled Message does not necessarily mean the entire order is dead; some portion of the order may still be alive.

18.2 Structure

Name	Mult.	Type	Description
Type	[0..1]	CodeSet	Canceled Order Message.
Timestamp	[1..1]	Timestamp	Expressed as nanoseconds since midnight.
UserRefNum	[1..1]	UserRefNum	The UserRefNum of the order being (partially) canceled.
Quantity	[1..1]	Integer	The number of shares being decremented from the order. This number is incremental, not cumulative.
OrderCancelReason	[1..1]	CodeSet	Reason the order was reduced or canceled.
AppendageLength	[1..1]	Integer	The length of the remaining Optional Appendage field.
OptionalAppendage	[1..1]	TagValue	The available options supported on this message are: UserRefIdx

19 OrderExecuted

Category: SingleGeneralOrderHandling

19.1 Message Functionality

An Executed Order Message informs you that all or part of an order has been executed.

19.2 Structure

Name	Mult.	Type	Description
Type	[0..1]	CodeSet	Order Executed Message.
Timestamp	[1..1]	Timestamp	Expressed as nanoseconds since midnight.
UserRefNum	[1..1]	UserRefNum	The UserRefNum of the order being executed.
Quantity	[1..1]	Integer	The incremental number of shares just executed.
Price	[1..1]	Price	The price at which the shares were executed.
LiquidityFlag	[1..1]	CodeSet	Liquidity flag the order would have received.
MatchNumber	[1..1]	Numeric	Assigned by the exchange to identify the trade. Both the buy and the sell executions participating in the trade will share the same match number.
AppendageLength	[1..1]	Integer	The length of the remaining Optional Appendage field.
OptionalAppendage	[1..1]	TagValue	**Field is missing from the PDF spec** The available options supported on this message are: UserRefIdx

20 OrderModified

Category: SingleGeneralOrderHandling

20.1 Message Functionality

An Order Modified Message is sent in response to an order modify request.

20.2 Structure

Name	Mult.	Type	Description
Type	[0..1]	CodeSet	Order Modified Message.
Timestamp	[1..1]	Timestamp	Expressed as nanoseconds since midnight.
UserRefNum	[1..1]	UserRefNum	The UserRefNum of the order that was modified.
Side	[1..1]	CodeSet	The side as entered in the Order Modify Request.
Quantity	[1..1]	Integer	Total number of shares outstanding.
AppendageLength	[1..1]	Integer	The length of the remaining Optional Appendage field.
OptionalAppendage	[1..1]	TagValue	The available options supported on this message are: UserRefIdx

21 OrderPriorityUpdate

Category: SingleGeneralOrderHandling

21.1 Message Functionality

A Priority Update Message is sent whenever priority of the order has been changed by the system.

21.2 Structure

Name	Mult.	Type	Description
Type	[0..1]	CodeSet	Order Priority Update Message.
Timestamp	[1..1]	Timestamp	Expressed as nanoseconds since midnight.
UserRefNum	[1..1]	UserRefNum	The UserRefNum of the order whose priority was updated.
Price	[1..1]	Price	The limit price of the order.
Display	[1..1]	CodeSet	The new display for the order. Y = Anonymous - Price to Comply
OrderReferenceNumber	[1..1]	Numeric	The day-unique Order Reference Number assigned by NASDAQ to this order. As a result of the updated priority, a new order reference number will be assigned.
AppendageLength	[1..1]	Integer	The length of the remaining Optional Appendage field.
OptionalAppendage	[1..1]	TagValue	The available options supported on this message are: UserRefIdx

22 OrderReplaced

Category: SingleGeneralOrderHandling

22.1 Message Functionality

This message acknowledges the receipt and acceptance of a valid Replace Order Message. The data fields from the Replace Order Message are echoed back in this message. Note that the accepted values may differ from the entered values for some fields. You will receive one and only one of these two for each replacement.

Like Accepted Messages, Replaced Messages use the Order State field to denote that a replace was accepted and then automatically canceled when the Order State is Order Dead ("D"). No further Executed Messages nor Canceled Messages will be received for the replaced order unless the Order State is not Order Dead.

The Shares field on the replace indicates how many shares were left exposed when the replacement completed. E.g.:

- Enter Order Message for 500 shares
- Accepted Message for 500 shares
- Executed Messages for 100 shares
- Replace Order Message for 500 shares
- Replaced Messages with 400 shares

The 400 shares in the Replace Message indicate that 400 shares exist on the book. This same scenario could happen if the execution was in flight back to you while the Replace Order Message was traveling to NASDAQ as follows:

- Enter Order Message for 500 shares
- Accepted Message for 500 shares
- Replace Order Message for 500 shares
- Executed Messages for 100 shares on original order
- Replaced Messages with 400 shares

22.2 Structure

Name	Mult.	Type	Description
Type	[0..1]	CodeSet	Replaced Message Identifier.
Timestamp	[1..1]	Timestamp	Expressed as nanoseconds since midnight.
OrigUserRefNum	[1..1]	UserRefNum	The UserRefNum of the order being replaced.
UserRefNum	[1..1]	UserRefNum	The UserRefNum of the replacement order, as entered.
Side	[1..1]	CodeSet	The side indicator as entered on the original order in the chain.
Quantity	[1..1]	Integer	Total number of shares outstanding.
Symbol	[1..1]	Alpha	Stock symbol as entered.
Price	[1..1]	Price	The accepted price of the replacement. Please note that the accepted price could potentially be different than the entered price if the order was re-priced by NASDAQ on entry. The accepted price will always be better than or equal to the entered.
TimeInForce	[1..1]	CodeSet	The accepted Time in Force of the replacement. Please note that the accepted Time in Force may potentially be different than the entered Time in Force. The accepted Time in Force will always be equal to or shorter in scope than the entered Time in Force.
Display	[1..1]	CodeSet	The accepted display type for the order. Y = visible N = hidden A = attributable Z = conformant
OrderReferenceNumber	[1..1]	Numeric	The day-unique Order Reference Number assigned by NASDAQ to this order.
Capacity	[1..1]	CodeSet	The capacity specified on the order.
InterMarketSweepEligibility	[1..1]	CodeSet	Y = eligible N = not eligible
CrossType	[1..1]	CodeSet	The cross type as entered.
OrderState	[1..1]	CodeSet	L = Order Live D = Order Dead
ClOrdID	[1..1]	Alpha	Customer order identifier for replacement order.
AppendageLength	[1..1]	Integer	The length of the remaining Optional Appendage field.
OptionalAppendage	[1..1]	TagValue	The available options supported on this message are: Firm MinQty MaxFloor PriceType PostOnly ExpireTime TradeNow HandleInst BBOWeightIndicator UserRefIdx

23 OrderRestated

Category: SingleGeneralOrderHandling

23.1 Message Functionality

The Order Restated Message is sent to indicate that the system has modified an order as part of its order management.

23.2 Structure

Name	Mult.	Type	Description
Type	[0..1]	CodeSet	Order Restated Message.
Timestamp	[1..1]	Timestamp	Expressed as nanoseconds since midnight.
UserRefNum	[1..1]	UserRefNum	The UserRefNum of the order being restated.
OrderRestateReason	[1..1]	CodeSet	The reason for this order being restated. R = Refresh of display (on an order with reserves) P = Update of displayed price
AppendageLength	[1..1]	Integer	The length of the remaining Optional Appendage field.
OptionalAppendage	[1..1]	TagValue	The available options supported on this message are: DisplayQuantity DisplayPrice SecondaryOrdRefNum UserRefIdx

24 Rejected

Category: SingleGeneralOrderHandling

24.1 Message Functionality

A Rejected Message may be sent in response to an Enter Order Message or Replace Order Message if the order or replace cannot be accepted at this time. The reason for the rejection is given.

The Order UserRefNum of a Rejected Message cannot be re-used.

24.2 Structure

Name	Mult.	Type	Description
Type	[0..1]	CodeSet	Rejected Order Message.
Timestamp	[1..1]	Timestamp	Expressed as nanoseconds since midnight.
UserRefNum	[1..1]	UserRefNum	The UserRefNum of the order being rejected.
OrderRejectReason	[1..1]	CodeSet	The reason the order was rejected.
ClOrdID	[1..1]	Alpha	Customer order identifier for order being rejected.
AppendageLength	[1..1]	Integer	The length of the remaining Optional Appendage field.
OptionalAppendage	[1..1]	TagValue	The available options supported on this message are: UserRefIdx

25 ReplaceOrderRequest

Category: SingleGeneralOrderHandling

25.1 Message Functionality

The Replace Order Message allows you to alter most of the attributes of an order in a single message. This is more efficient than canceling an existing order and immediately succeeding it with a new order. Replacing an order always gives it a new timestamp for its time priority on the book. If you wish you simply partially cancel an order and retain its time priority, send a Cancel Order Message instead.

There are two Order UserRefNums in the Replace Order Message. The first must be filled out with the Order UserRefNum of the existing order; the second must be a new Order UserRefNum for the replacement. The replacement Order UserRefNum must be unique in the same way as Order UserRefNums are in the Enter Order Message, and replacement Order UserRefNums may not be the same as the UserRefNum sent in Enter Order Messages. Any replacement Order UserRefNum that has already been used in another Enter Order Message or Replace Order Message will be ignored.

NASDAQ may respond to the Replace Order Message in several ways:

1. If the order for the existing Order UserRefNum is no longer live or if the replacement Order UserRefNum was already used, the replacement will be silently ignored. The replacement Order UserRefNum will not be consumed and may be reused in this case.
2. If the order for the existing Order UserRefNum is live but the details of the replace are invalid (e.g.: new Shares >= 1,000,000), a Cancel Order Message will take the existing order out of the book. The replacement Order UserRefNum will not be consumed, and may be reused in this case.
3. If the order for the existing Order UserRefNum is live but the existing order cannot be canceled (e.g. the existing Order is a cross order in the late period), there will be an Order Reject Message. This reject message denotes that no change has occurred to the existing order; the existing order remains fully intact with its original instructions. The Order Reject Message consumes the replacement Order UserRefNum, so the replacement Order UserRefNum may not be reused.
4. If the order for the existing Order UserRefNum is live and can be replaced, you will receive either a Replaced Message or an Atomically Replaced and Canceled Message.

Replace Order Messages may be chained together, so that a single order is replaced over and over again. There is no limit to the number of replaces; however no single order/replace chain may execute more than 999,999 shares cumulatively.

The Shares on the replace denote the total number of shares liable for the whole chain. Here is an example:

- Enter Order Message for 500 shares
- Accepted Message for 500 shares
- Executed Message for 100 shares

At this point, you decide to replace the order. If you want to be exposed for

- the remaining 400 shares, send the Replace Order Message with 500 Shares. This 500 equals the 400 exposed plus the 100 previously executed.
- a new 500 shares, send the Replace Order Message with 600 Shares. This 600 equals the 500 new shares plus the 100 previously executed.

This may seem a bit confusing at first, but it inhibits the risk of double-liability throughout the order/replace chain.

25.2 Structure

Name	Mult.	Type	Description
Type	[0..1]	CodeSet	Identifies this message as Replace.
OrigUserRefNum	[1..1]	UserRefNum	This must be filled out with the Order UserRefNum sent on the Enter Order Message or last Replace Order Message.
UserRefNum	[1..1]	UserRefNum	The replacement Order UserRefNum must be unique and strictly increasing for each OUCH account.
Quantity	[1..1]	Integer	Total number of shares liable, inclusive of previous executions and Self Match Prevention decremented shares on this order chain. Must be greater than zero and less than 1,000,000.
Price	[1..1]	Price	The price of the replacement order. Please refer to the section in Data Types for more clarification.
TimeInForce	[1..1]	CodeSet	Corresponds to TimeInForce (59) in Nasdaq FIX. 0 = Day (Market Hours) 3 = IOC 5 = GTX (Extended Hours) 6 = GTT (ExpireTime needs to be specified)
Display	[1..1]	CodeSet	Y = visible N = hidden A = attributable
InterMarketSweepEligibility	[1..1]	CodeSet	Y = eligible N = not eligible
ClOrdID	[1..1]	Alpha	Customer order identifier for replacement order.
AppendageLength	[1..1]	Integer	The length of the remaining Optional Appendage field.

Name	Mult.	Type	Description
OptionalAppendage	[1..1]	TagValue	The available options supported on this message are: MinQty MaxFloor PriceType PostOnly ExpireTime TradeNow HandleInst RandomReserves PegOffset DiscretionPrice DiscretionPriceType DiscretionOffset CustomerType GroupID SharesLocated UserRefIdx

26 SystemEvent

Category: SingleGeneralOrderHandling

26.1 Message Functionality

System Event Messages signal events that affect the entire NASDAQ system.

26.2 Structure

Name	Mult.	Type	Description
Type	[0..1]	CodeSet	System Event Message.
Timestamp	[1..1]	Timestamp	Expressed as nanoseconds since midnight.
EventCode	[1..1]	CodeSet	**S = Start Of Day**, indicating that exchange is open and is ready to accept orders. **E = End Of Day**, indicating that the exchange is closed and will no longer accept new orders. Note that it is still possible to receive breaks and cancels after this event.

27 Message Elements

27.1 Data Types

Data type	Description
Alpha	Alpha fields may contain upper and lowercase characters. All fixed-width alpha fields are left-justified and padded on the right with spaces.
Integer	A numeric value (4 bytes).
Numeric	All Numeric fields are binary formatted, big-endian numbers. Sizes (shares quantities, field lengths) should be treated as unsigned values.
Price	Prices are numeric fields with an implied 4 decimal places. Prices are to be treated as unsigned numeric fields, unless designated otherwise. The maximum price currently supported is $199,999.9900 (decimal, 7735939C hex). To flag an order as a market order for a cross, use the special price of $214,748.3647 (decimal, 7FFFFFFF hex). Orders entered with a price of $200,000.00 or the max integer value will also be treated as market orders.
TagValue	An optional attribute on an order is communicated via a TagValue element. The set of optional attributes are set on an order via an options appendage. Each of the individual options formatted as a TagValue element, and the options appendage is then constructed by concatenating together the selected set of options.
Timestamp	Expressed as nanoseconds since midnight.
UserRefNum	A UserRefNum is an unsigned numeric. For a given OUCH port, the UserRefNum is used as a transaction identifier, and must be both unique and strictly increasing throughout the trading day. The system ignores new order requests identified with UserRefNums lower than the last one processed, assuming they are retransmissions. Client however has an option to multiplex their order flow via the use of an optional tag UserRefIdx. When this tag is present the UserRefNum is then assumed to be linked to an "order flow channel" specified by the UserRefIdx and the above rules regarding the use of UserRefNum are applied only within this "order flow channel" instead of the port globally.

27.2 Data Dictionary

27.2.1 AIQStrategy

AIQ strategy used on the cancelled order.

Type: Alpha

Used in messages: AIQCanceled

27.2.2 AppendageLength

The length of the remaining Optional Appendage field.

Type: Integer

Used in messages: AIQCanceled, AccountQueryRequest, AccountQueryResponse, BrokenTrade, CancelOrderRequest, CancelPending, CancelReject, DisableOrderEntryRequest, DisableOrderEntryResponse, EnableOrderEntryRequest, EnableOrderEntryResponse, EnterOrder, MassCancelRequest, MassCancelResponse, ModifyOrderRequest, OrderAccepted, OrderCanceled, OrderExecuted, OrderModified, OrderPriorityUpdate, OrderReplaced, OrderRestated, Rejected, ReplaceOrderRequest

27.2.3 BrokenTradeReason

Reason a trade was broken.

Type: Alpha

Allowed values in BrokenTradeReasonCodeSet:

Code	Name	Description
E	Erroneous	Trade deemed clearly erroneous.
C	Consent	Both parties agreed to break the trade.
S	Supervisory	Manually broken by supervisory.
X	External	Trade broken by an external third party.

Used in messages: BrokenTrade

27.2.4 Capacity

The capacity specified on the order.

Type: Alpha

Allowed values in CapacityCodeSet:

Code	Name	Description
A	Agency	Agency
P	Principal	Principal
R	Riskless	Riskless

Code	Name	Description
O	Other	Other

Used in messages: EnterOrder, OrderAccepted, OrderReplaced

27.2.5 ClOrdID

Customer order identifier. ClOrdID will not be checked for day-uniqueness for each OUCH account.

Type: Alpha

Used in messages: BrokenTrade, EnterOrder, OrderAccepted, OrderReplaced, Rejected, ReplaceOrder-Request

27.2.6 CrossType

The cross type as entered.

Type: Alpha

Allowed values in CrossTypeCodeSet:

Code	Name	Description
N	ContinuousMarket	Continuous market
O	OpeningCross	Opening cross. Nasdaq only
C	ClosingCross	Closing cross. Nasdaq only
H	HaltIPO	Halt/IPO. Nasdaq only
S	Supplemental	Supplemental. Nasdaq only
R	Retail	Retail. BX only
E	ExtendedLife	Extended life. Nasdaq only
A	AfterHoursClose	After hours close. Nasdaq only

Used in messages: EnterOrder, OrderAccepted, OrderReplaced

27.2.7 DecrementShares

The number of shares just decremented from the order. This number is incremental, not cumulative.

Type: Numeric

Used in messages: AIQCanceled

27.2.8 Display

The accepted display type for the order.

Type: Alpha

Allowed values in DisplayCodeSet:

Code	Name	Description
Y	Visible	Visible
N	Hidden	Hidden
A	Attributable	Attributable
Y	Anonymous	Price to Comply
Z	Conformant	Conformant

Used in messages: EnterOrder, OrderAccepted, OrderPriorityUpdate, OrderReplaced, ReplaceOrderRequest

27.2.9 EventCode

Indicates if the exchange is open and ready to accept orders.

Type: Alpha

Allowed values in EventCodeCodeSet:

Code	Name	Description
S	StartOfDay	Indicating that exchange is open and is ready to accept orders.
E	EndOfDay	Indicating that the exchange is closed and will no longer accept new orders. Note that it is still possible to receive breaks and cancels after this event.

Used in messages: SystemEvent

27.2.10 ExecutionPrice

Price at which the trade occurred.

Type: Price

Used in messages: AIQCanceled

27.2.11 Firm

This field should contain all caps. Firm identifier for the order entry firm. One logical OUCH account can potentially enter orders for multiple firms in a Service Bureau configuration. If this field is blank-filled, the default firm for the OUCH account will be used.

Type: Alpha

Used in messages: DisableOrderEntryRequest, DisableOrderEntryResponse, EnableOrderEntryRequest, EnableOrderEntryResponse, MassCancelRequest, MassCancelResponse

27.2.12 InterMarketSweepEligibility

Type: Alpha

Allowed values in InterMarketSweepEligibilityCodeSet:

Code	Name	Description
Y	Eligible	Eligible
N	NonEligible	Not eligible

Used in messages: EnterOrder, OrderAccepted, OrderReplaced, ReplaceOrderRequest

27.2.13 LiquidityFlag

Liquidity flag the order would have received.

Type: Alpha

Allowed values in LiquidityFlagCodeSet:

Code	Name	Description
A	Added	Added (All markets)
C	ClosingCross	Closing Cross (Nasdaq only)
e	RetailExecutionDisplayed	Retail designated execution that added displayed liquidity (Nasdaq/BX only)
H	HaltIPOCross	Halt/IPO Cross (Nasdaq only)
i	AfterHoursClosingCross	After hours closing cross (Nasdaq only)
J	NonDisplayed	Non-displayed adding liquidity (All markets)
j	RetailPriceImproving	RPI (Retail Price Improving) order provides liquidity (BX only)
k	MidpointOrder	Added liquidity via a midpoint order (All markets)
K	HaltCross	Halt Cross (Nasdaq only)
L	ClosingCrossImbalanceOnly	Closing Cross (imbalance-only) (Nasdaq only)
M	OpeningCrossImbalanceOnly	Opening Cross (imbalance-only) (Nasdaq only)
m	RemovedAtMidpoint	Removed liquidity at a midpoint (All markets)
N	PassiveMidpointExecution	Passive midpoint execution (Nasdaq/BX only)
n	MidpointExtendedLife	Midpoint Extended Life Order execution (Nasdaq only)
O	OpeningCross	Opening Cross (Nasdaq only)
p	RemovedPriceNonDisplayed	Removed price improving non-displayed liquidity (BX only)
q	RemovedNonRetailPriceImproving-Midpoint	RMO Retail Order removes non-RPI midpoint liquidity (BX only)
R	Removed	Removed (All markets)
r	RemovedRetailPriceImproving	Retail Order removes RPI liquidity (BX only)
t	PriceImprovingNonDisplayedNonRetailPriceImproving	Retail Order removes price improving non-displayed liquidity other than RPI liquidity (BX only)
u	NonDisplayedReserve	Added non-displayed liquidity via a Reserve order (All markets)
0	Supplemental	Supplemental order execution (Nasdaq only)
7	DisplayedImproveNBBO	Displayed, liquidity-adding order improves the NBBO (Nasdaq/BX only)
8	DisplayedSetQBBOJoiningNBBO	Displayed, liquidity-adding order sets the QBBO while joining the NBBO (Nasdaq/BX only)
1	NoRetailPriceImprovement	RPI order provides liquidity, No RPII (BX only)

Used in messages: AIQCanceled, OrderExecuted

27.2.14 MatchNumber

Assigned by the exchange to identify the trade. Both the buy and the sell executions participating in the trade will share the same match number.

Type: Numeric

Used in messages: BrokenTrade, OrderExecuted

27.2.15 NextUserRefNum

The next available UserRefNum

Type: UserRefNum

Used in messages: AccountQueryResponse

27.2.16 OptionalAppendage

The available options supported.

Type: TagValue

Used in messages: AIQCanceled, AccountQueryRequest, AccountQueryResponse, BrokenTrade, CancelOrderRequest, CancelPending, CancelReject, DisableOrderEntryRequest, DisableOrderEntryResponse, EnableOrderEntryRequest, EnableOrderEntryResponse, EnterOrder, MassCancelRequest, MassCancelResponse, ModifyOrderRequest, OrderAccepted, OrderCanceled, OrderExecuted, OrderModified, OrderPriorityUpdate, OrderReplaced, OrderRestated, Rejected, ReplaceOrderRequest

27.2.17 OrderCancelReason

Reason the order was canceled.

Type: Alpha

Allowed values in OrderCancelReasonCodeSet:

Code	Name	Description
D	RegulatoryRestriction	This order cannot be executed because of a regulatory restriction (e.g.: trade through restrictions).
E	Closed	Any DAY order that was received after the closing cross is complete in a given symbol will receive this cancel reason.

Code	Name	Description
F	PostOnlyCancelNMS	This Post Only order was cancelled because it would have been price slid for NMS.
G	PostOnlyCancelContraSide	This Post Only order was cancelled because it would have been price slid due to a contra side displayed order on the book.
H	Halted	The on-open order was canceled because the symbol remained halted after the opening cross completed.
I	ImmediateOrCancel	Immediate or Cancel Order.
K	MarketCollars	This order cannot be executed because of Market Collars.
Q	SelfMatchPrevention	The order was cancelled because it would have executed with an existing order entered by the same MPID.
S	Supervisory	The order was manually canceled or reduced by an NASDAQ supervisory terminal.
T	TimeOut	The Time In Force for this order has expired.
U	UserRequestedCancel	Sent in response to a Cancel Request Message.
X	OpenProtection	Orders that are cancelled as a result of the Opening Price Protection Threshold.
Z	SystemCancel	This order was cancelled by the system.
e	CompanyDirectListingCapitalRaise	Order exceeds allowable shares offered.

Used in messages: AIQCanceled, OrderCanceled

27.2.18 OrderReferenceNumber

The day-unique Order Reference Number assigned by NASDAQ to this order.

Type: Numeric

Used in messages: OrderAccepted, OrderPriorityUpdate, OrderReplaced

27.2.19 OrderRejectReason

Reason the order was rejected.

Type: Numeric

Allowed values in OrderRejectReasonCodeSet:

Code	Name	Description
1	QuoteUnavailable	Quote Unavailable
2	DestinationClosed	Destination Closed
3	InvalidDisplay	Invalid Display
4	InvalidMaxFloor	Invalid Max Floor
5	InvalidPegType	Invalid Peg Type
6	FatFinger	Fat Finger
7	Halted	Halted
8	ISONotAllowed	ISO Not Allowed
9	InvalidSide	Invalid Side
10	ProcessingError	Processing Error
11	CancelPending	Cancel Pending
12	FirmNotAuthorized	Firm Not Authorized
13	InvalidMinQuantity	Invalid Min Quantity
14	NoClosingReferencePrice	No Closing Reference Price
15	Other	Other
16	CancelNotAllowed	Cancel Not Allowed
17	PeggingNotAllowed	Pegging Not Allowed
18	CrossedMarket	Crossed Market
19	InvalidQuantity	Invalid Quantity
20	InvalidCrossOrder	Invalid Cross Order
21	ReplaceNotAllowed	Replace Not Allowed
22	RoutingNotAllowed	Routing Not Allowed
23	InvalidSymbol	Invalid Symbol
24	Test	Test
25	LateLOCTooAggressive	Late LOC Too Aggressive
26	RetailNotAllowed	Retail Not Allowed
27	InvalidMidpointPostOnlyPrice	Invalid Midpoint Post Only Price
28	InvalidDestination	Invalid Destination
29	InvalidPrice	Invalid Price
30	SharesExceededThreshold	Shares Exceeded Threshold
31	ExceedsMaximumAllowedNotional-Value	Exceeds Maximum Allowed Notional Value
32	RiskAggregateExposureExceeded	Risk Aggregate Exposure Exceeded
33	RiskMarketImpact	Risk Market Impact

Code	Name	Description
34	RiskRestrictedStock	Risk Restricted Stock
35	RiskShortSellRestricted	Risk Short Sell Restricted
36	RiskOrderTypeRestricted	Risk Order Type Restricted
37	RiskExceedsADVLimit	Risk Exceeds ADV Limit
38	RiskFatFinger	Risk Fat Finger
39	RiskLocateRequired	Risk Locate Required
40	RiskSymbolMessageRateRestriction	Risk Symbol Message Rate Restriction
41	RiskPortMessageRateRestriction	Risk Port Message Rate Restriction
42	RiskDuplicateMessageRateRestriction	Risk Duplicate Message Rate Restriction

Used in messages: Rejected

27.2.20 OrderRestateReason

Reason the order was reduced.

Type: Alpha

Allowed values in OrderRestateReasonCodeSet:

Code	Name	Description
R	Refresh	Refresh of display (on an order with reserves).
P	Price	Update of displayed price.

Used in messages: OrderRestated

27.2.21 OrderState

Used to denote that an order entry or replace was accepted and then automatically canceled and that no further messages will be received for that order.

Type: Alpha

Allowed values in OrderStateCodeSet:

Code	Name	Description
L	OrderLive	Order live
D	OrderDead	Order dead

Used in messages: OrderAccepted, OrderReplaced

27.2.22 OrigUserRefNum

This must be filled out with the Order UserRefNum sent on the Enter Order Message or last Replace Order Message.

Type: UserRefNum

Used in messages: OrderReplaced, ReplaceOrderRequest

27.2.23 Price

The price of the order.

Type: Price

Used in messages: EnterOrder, OrderAccepted, OrderExecuted, OrderPriorityUpdate, OrderReplaced, ReplaceOrderRequest

27.2.24 Quantity

Total number of shares. Must be greater than zero and less than 1,000,000.

Type: Integer

Used in messages: CancelOrderRequest, EnterOrder, ModifyOrderRequest, OrderAccepted, Order-Canceled, OrderExecuted, OrderModified, OrderReplaced, ReplaceOrderRequest

27.2.25 QuantityPreventedFromTrading

Shares that would have executed if the trade would have occurred.

Type: Integer

Used in messages: AIQCanceled

27.2.26 Side

B = buy

S = sell

T = sell short

E = sell short exempt

Type: Alpha

Allowed values in SideCodeSet:

Code	Name	Description
B	Buy	Buy
S	Sell	Sell
T	SellShort	Sell short
E	SellShortExempt	Sell short exempt

Used in messages: EnterOrder, ModifyOrderRequest, OrderAccepted, OrderModified, OrderReplaced

27.2.27 Symbol

Stock Symbol.

Type: Alpha

Used in messages: EnterOrder, MassCancelRequest, MassCancelResponse, OrderAccepted, OrderReplaced

27.2.28 TimeInForce

Corresponds to TimeInForce (59) in Nasdaq FIX.

Type: Alpha

Allowed values in TimeInForceCodeSet:

Code	Name	Description
0	Day	Day (Market Hours)
3	IOC	IOC

Code	Name	Description
5	GTX	GTX (Extended Hours)
6	GTT	GTT (Expire time needs to be specified)
E	AfterHours	After hours

Used in messages: EnterOrder, OrderAccepted, OrderReplaced, ReplaceOrderRequest

27.2.29 Timestamp

Expressed as nanoseconds since midnight.

Type: Timestamp

Used in messages: AIQCanceled, AccountQueryResponse, BrokenTrade, CancelPending, CancelReject, DisableOrderEntryResponse, EnableOrderEntryResponse, MassCancelResponse, OrderAccepted, OrderCanceled, OrderExecuted, OrderModified, OrderPriorityUpdate, OrderReplaced, OrderRestated, Rejected, SystemEvent

27.2.30 Type

Identifies the message type.

Type: Alpha

Allowed values in TypeCodeSet:

Code	Name	Description
O	EnterOrder	
U	ReplaceOrderRequest	The Replace Order Message allows you to alter most of the attributes of an order in a single message. This is more efficient than canceling an existing order and immediately succeeding it with a new order. Replacing an order always gives it a new timestamp for its time priority on the book. If you wish you simply partially cancel an order and retain its time priority, send a Cancel Order Message instead.
X	CancelOrderRequest	The Cancel Order Message is used to request that an order be canceled or reduced. In the Cancel Order Message, you must specify the new "intended order size" for the order. The "intended order size" is the maximum number of shares that can be executed in total after the cancel is applied.

Code	Name	Description
M	ModifyOrderRequest	The Modify Order Message is used to request modifications that will not affect order priority on the book. Since priority of the order does not change (exception noted), allowed modifications are restricted to only the ones specified in the message details below. Increasing share amount is not allowed and requests to do so will be ignored.
C	MassCancelRequest	The Mass Cancel Request message allows firms to initiate the cancellation of one or more orders that are currently booked at the exchange if they match the criteria specified in the request. If no optional criteria are specified then all orders for the specified firm on the account will be cancelled. Optional criteria can be specified in the Appendage field using the tags described below.
D	DisableOrderEntryRequest	The Disable Order Entry Request allows firms the ability to initiate the following requests to block submissions of new orders on a particular account.
E	EnableOrderEntryRequest	The Enable Order Entry Request allows firms the ability to initiate the following requests to unblock submission of new orders on a particular account.
Q	AccountQueryRequest	The Account Query Request message can be used when recovering state to request the next available UserRefNum that can be used for identifying new transactions.
S	SystemEvent	System Event Messages signal events that affect the entire NASDAQ system.
A	OrderAccepted	This message acknowledges the receipt and acceptance of a valid Enter Order Message. The data fields from the Enter Order Message are echoed back in this message. Note that the accepted values may differ from the entered values for some fields.
U	OrderReplaced	This message acknowledges the receipt and acceptance of a valid Replace Order Message. The data fields from the Replace Order Message are echoed back in this message. Note that the accepted values may differ from the entered values for some fields. You will receive one and only one of these two for each replacement.
C	OrderCanceled	A Canceled Message informs you that an order has been reduced or canceled. This could be acknowledging a Cancel Order Message, or it could be the result of the order timing out or being canceled automatically.
D	AIQCanceled	

Code	Name	Description
E	OrderExecuted	An Executed Order Message informs you that all or part of an order has been executed.
B	BrokenTrade	A Broken Trade Message informs you that an execution has been broken. The trade is no longer good and will not clear. The reason for the break is given.
J	RejectedOrder	A Rejected Message may be sent in response to an Enter Order Message or Replace Order Message if the order or replace cannot be accepted at this time. The reason for the rejection is given.
P	CancelPending	A Cancel Pending Message is sent in response to a cancel request for a cross order during a pre-cross late period signifying that it cannot be canceled at this time, but any unexecuted portion of this order will automatically be canceled immediately after the cross completes.
I	CancelReject	A Cancel Reject Message is sent in response to a partial cancel request (with non-zero "intended order size") for a cross order during a pre-cross late period signifying that it cannot be partially canceled at this time. No automatic cancel will be scheduled for this order. Clients could repeat their request for any unexecuted portion of the order after the cross completes.
T	OrderPriorityUpdate	A Priority Update Message is sent whenever priority of the order has been changed by the system.
M	OrderModified	An Order Modified Message is sent in response to an order modify request.
R	OrderRestated	The Order Restated Message is sent to indicate that the system has modified an order as part of its order management.
X	MassCancelResponse	This message acknowledges the receipt of a valid Mass Cancel Request message. The data fields from the Mass Cancel Request message are echoed back in this message.
G	DisableOrderEntryResponse	This message acknowledges the receipt of the Disable Order Entry Request message. The data fields from the Enter Order Message are echoed back in this message.
K	EnableOrderEntryResponse	This message acknowledges the receipt of the Enable Order Entry Request message. The data fields from the Enable Order Entry Request message are echoed back in this message.
Q	AccountQueryResponse	The Account Query Response message in sent in response to an Account Query Request to indicate the next available UserRefNum that can be used to identify new transactions.

Used in messages: AIQCanceled, AccountQueryRequest, AccountQueryResponse, BrokenTrade, Can-

celOrderRequest, CancelPending, CancelReject, DisableOrderEntryRequest, DisableOrderEntryResponse, EnableOrderEntryRequest, EnableOrderEntryResponse, EnterOrder, MassCancelRequest, MassCancelResponse, ModifyOrderRequest, OrderAccepted, OrderCanceled, OrderExecuted, OrderModified, OrderPriorityUpdate, OrderReplaced, OrderRestated, Rejected, ReplaceOrderRequest, SystemEvent

27.2.31 UserRefNum

UserRefNum must be day-unique and strictly increasing for each OUCH account.

Type: UserRefNum

Used in messages: AIQCanceled, BrokenTrade, CancelOrderRequest, CancelPending, CancelReject, DisableOrderEntryRequest, DisableOrderEntryResponse, EnableOrderEntryRequest, EnableOrderEntryResponse, EnterOrder, MassCancelRequest, MassCancelResponse, ModifyOrderRequest, OrderAccepted, OrderCanceled, OrderExecuted, OrderModified, OrderPriorityUpdate, OrderReplaced, OrderRestated, Rejected, ReplaceOrderRequest