O*U*C*H
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1 Overview

NASDAQ accepts limit orders from system participants and executes matching orders when possible. Non-matching orders may be added to the NASDAQ Limit Order Book, a database of available limit orders, where they wait to be matched in price-time priority.

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.

OUCH only provides a method for participants to send orders to NASDAQ and receive updates on those orders entered. For information about all orders entered into and executed on the NASDAQ book, refer to the ITCH protocol (available separately).

OUCH is the low-level native protocol for connecting to NASDAQ. It is designed to offer the maximum possible performance at the cost of flexibility and ease of use. For applications that do not require this extreme level of performance, NASDAQ offers other, more standard interfaces that may be more suitable and easier to develop to.

1.1 Architecture

The OUCH protocol is composed of logical messages passed between the OUCH host and the client application. Each message type has a fixed message length.

All messages sent from the OUCH host to the client are assumed to be sequenced, and their delivery must be guaranteed by some lower level protocol. The SoupBinTCP and UFO (available separately) are the typical lower level protocols used to guarantee the delivery and sequencing of OUCH messages sent from the host to the client.

Messages sent from the OUCH client to the host are inherently non-guaranteed, even if they are carried by a lower level protocol that guarantees delivery (like TCP/IP sockets). Therefore, all host-bound messages are designed so that they can be benignly resent for robust recovery from connection and application failures.

Each physical OUCH host port is bound to a NASDAQ-assigned logical OUCH Account. On a given day, every order entered on OUCH is uniquely identified by the combination of the logical OUCH Account and the participant-created Token field.

1.2 Data Types

All integer fields are unsigned big-endian (network byte order) binary encoded numbers.

Alpha fields are left-justified and padded on the right with spaces.

Token fields are alphanumeric. All letters and numbers are allowed, as well as spaces. Tokens must be day unique per OUCH account. Tokens are case sensitive.

Prices are integer fields. When converted to a decimal format, prices are in fixed point format with 6 whole number places followed by 4 decimal digits. The maximum price in OUCH 4.0 is $199,999.9900 (decimal, 7735939C hex). When entering market orders for a cross, use the special price of $214,748.3647 (decimal, 7FFFFFFF hex).

Time in Force fields are also integer fields. Time in force specifies how many seconds the order should live. This allows participants to control when an order expires. Special values for Time in Force are listed below. Values larger than 99,999 is considered invalid and orders will only be open during system hours.

1.3 Special Values for Time in Force

Special Values for Time in Force	
Value	**Explanation**
0 (0 hex)	Immediate or cancel — If no match for the order is available at the moment the order is accepted, any unexecuted shares in the order are immediately canceled.
99998 (1869E hex)	Market Hours — Indicates that the order should live until the market close on the primary market for the security
99999 (1869F hex)	System Hours — Indicates that the order should live until the end of the NASDAQ trading day

1.4 Fault Redundancy

A single OUCH Account can be bound to multiple physical OUCH machines. These OUCH machines then act as mirrors of each other for fault redundancy. In this configuration, both machines are able to accept orders and cancel requests, and any outbound messages would be simultaneously generated by both physical OUCH hosts.

1.5 Service Bureau Configuration

A single OUCH Account can accept orders from one or more firms, allowing a service bureau configuration. The service bureau OUCH Account must be specifically authorized to enter trades on behalf of each represented participant with a NASDAQ Service Bureau Agreement, available separately. Once an agreement has been submitted, the OUCH Account set up as the service bureau may enter orders for the represented firm by putting the represented firm's Market Maker Identifier in the Firm field upon order entry.

2 Inbound Messages

Inbound messages are sent from the participant's application to the OUCH host. They are not sequenced. All Inbound Messages may be repeated benignly. This gives the client the ability to re-send any Inbound message if it is uncertain whether NASDAQ received it in the case of a connection loss or an application error.

The idea of benign inbound message retransmission with end-to-end acknowledgement is fundamental to NASDAQ's fail-over redundancy. If your connection ever fails, there is no way for you to know if pending messages actually made it over the link before the failure. A

robust OUCH client can safely re-send any pending messages over a mirrored link without worrying about generating duplicates. This applies to NASDAQ's disaster fail over capability as well; if NASDAQ ever needs to fail over to the backup site, some messages sent at the moment of the failure may be lost. A robust application can simply re-send the pending messages, making the fail over seamless to the end user.

All inbound messages on an OUCH port are processed sequentially. This guarantees that if two orders are entered consecutively on the same connection, the first order entered will always be accepted first.

2.1 Enter Order Message

The Enter Order Message lets you enter a new order into NASDAQ.

Each new order must have an Order Token that is unique for that day and that logical OUCH account. If you send a valid order, you should receive an acknowledgement as an Accepted Message or an Atomically Accepted and Canceled Message. If you send an Enter Order Message with a previously used Order Token, the new order will be ignored.

Enter Order Message				
Name	**Offset**	**Len**	**Value**	**Notes**
Type	0	1	"O"	Identifies this message as Enter Order Message type
Order Token	1	14	Token	As described above in Data Types. You can put any information you like. Token must be day-unique for each OUCH account.
Buy/Sell Indicator	15	1	Alpha	"B" = buy order "S" = sell order "T" = sell short, client affirms ability to borrow securities in good deliverable form for delivery within three business days "E" = sell short exempt, client affirms ability to borrow securities in good deliverable form for delivery within three business days
Shares	16	4	Integer	Total number of shares entered. Must be greater than zero and less than 1,000,000
Stock	20	6	Alpha	Stock Symbol
Price	26	4	Integer	The price of the order. Please refer to the section in Data Types for more clarification.
Time in Force	30	4	Integer	The number of seconds that this order should live before being automatically canceled. Special values for Time in Force are listed in Data Types above.
Firm	34	4	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. If this field is blank-filled, the default firm for the OUCH Account will be

				used.
Display	38	1	Alpha	"A" = Attributable-Price to Display "Y" = Anonymous-Price to Comply "N" = Non-Display "P" = Post-Only "I" = Imbalance-Only (for opening and closing cross only) "M" = Mid-Point Peg "W" = Mid-Point Peg Post Only "L" = Post-Only and Attributable – Price to Display "m" = Mid-Point Peg and Mid-Point Trade Now "n" = Non-Display and Mid-Point Trade Now "B" = M-ELO and Continuous Book Midpoint
Capacity	39	1	Alpha	Values other than "A", "P", or "R" will be converted to "O" = Other "A" = agency "P" = principal "R" = riskless
Intermarket Sweep Eligibility	40	1	Alpha	"Y" = eligible "N" = not eligible "y" = Trade-at Intermarket Sweep Order
Minimum Quantity	41	4	Integer	Specifies the minimum acceptable quantity to execute
Cross Type	45	1	Alpha	"N" = No cross (continuous market) "O" = Opening cross "C" = Closing cross "H" = Halt/IPO cross (Must be market price, refer to Prices in Data Types) "S" = Supplemental Order "E" = Extended Life

2.2 Replace Order Message

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 Tokens in the Replace Order Message. The first must be filled out with the Order Token of the existing order; the second must be a new Order Token for the replacement. The replacement Order Token must be unique in the same way as Order Tokens are in the Enter Order Message, and replacement Order Tokens may not be the same as Tokens sent in Enter Order Messages. Any replacement Order Token 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 Token is no longer live or if the replacement Order Token was already used, the replacement will be silently ignored.
2) If the order for the existing Order Token is live but the details of the replace are invalid (e.g.: new Shares >= 1,000,000), a Canceled Order Message will take the existing order out of the book. The replacement Order Token will not be consumed, and may be reused in this case.
3) If the order for the existing Order Token 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 a 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 Reject Message consumes the replacement Order Token, so the replacement Order Token may not be reused.
4) If the order for the existing Order Token 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

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

2.3 Replace Order Message

Replace Order Message				
Name	**Offset**	**Len**	**Value**	**Notes**
Type	0	1	"U"	Identifies this message as Replace Order Message type
Existing Order Token	1	14	Token	This must be filled out with the exact Order Token sent on the Enter Order Message or last Replace Order Message.
Replacement Order Token	15	14	Token	As described above in Data Types. You can put any information you like. Token must be day-unique for each OUCH account.
Shares	29	4	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	33	4	Integer	The price of the replacement order. Please refer to the section in Data Types for more clarification.
Time in Force	37	4	Integer	The number of seconds that this replacement should live before being automatically

				canceled. Special values for Time in Force are listed in Data Types above.
Display	41	1	Alpha	"A" = Attributable-Price to Display "Y" = Anonymous-Price to Comply "N" = Non-Display "P" = Post-Only "I" = Imbalance-Only (for opening and closing cross only) "M" = Mid-Point Peg "W" = Mid-Point Peg Post Only "L" = Post-Only and Attributable – Price to Display "m" = Mid-Point Peg and Mid-Point Trade Now "n" = Non-Display and Mid-Point Trade Now "B" = M-ELO and Continuous Book Midpoint
Intermarket Sweep Eligibility	42	1	Alpha	"Y" = eligible "N" = not eligible "y" = Trade-at Intermarket Sweep Order
Minimum Quantity	43	4	Integer	Specifies the minimum acceptable quantity to execute

2.4 Cancel Order Message

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.

Cancel Order Message				
Name	**Offset**	**Len**	**Value**	**Notes**
Type	0	1	"X"	Cancel Order Message
Order Token	1	14	Token	The Order Token as was originally transmitted in an Enter Order Message
Shares	15	4	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.

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.

3 Outbound Sequenced Messages

Outbound messages are generated by the OUCH host port and received by your client application.

3.1 System Event Message

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

System Event Message				
Name	**Offset**	**Len**	**Value**	**Notes**
Message Type	0	1	"S"	System Event Message identifier
Timestamp	1	8	Integer	Timestamp – reflected as the number of nanoseconds past midnight.
Event Code	9	1	Alpha	See Event Codes below.

3.2 System Event Codes

System Event Codes	
Code	**Explanation**
"S"	**Start of Day —** This is always the first message each day. It indicates that NASDAQ is open and ready to start accepting orders.
"E"	**End of Day —** This indicates that NASDAQ is now closed and will not accept any new orders or replaces in this session. There will be no further executions during this session; however, it is still possible to receive Broken Trade Messages and Canceled Order Messages

3.2.1 Accepted Message

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. Order Dead means that the order was accepted and automatically cancelled.

Accepted Message				
Name	**Offset**	**Len**	**Value**	**Notes**
Message Type	0	1	"A"	"A" - Accepted Message Identifier
Timestamp	1	8	Integer	Timestamp – reflected as the number of nanoseconds past midnight.
Order Token	9	14	Token	The Order Token field as entered
Buy/Sell Indicator	23	1	Alpha	Buy/Sell Indicator as entered
Shares	24	4	Integer	Total number of shares accepted
Stock	28	6	Alpha	Stock symbol as entered
Price	34	4	Integer	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 NASDAQ on entry. The accepted price will always be better than or equal to the entered price.
Time in Force	38	4	Integer	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.
Firm	42	4	Alpha	The accepted firm for the order. Please note that if the firm was left blank on entry, the default firm for the OUCH account will appear here.
Display	46	1	Alpha	The accepted display type for the order. "A" = Attributable - Price to Display "I" = Imbalance-Only "N" = Non-Display "Y" = Anonymous - Price to Comply "Z" = Entered as displayed but changed to non-displayed (Priced to comply) "M" = Mid-Point Peg "W" = Mid-Point Peg Post Only "m" = Mid-Point Peg and Mid-Point Trade Now "n" = Non-Display and Mid-Point Trade Now "B" = M-ELO and Continuous Book Midpoint
Order Reference Number	47	8	Integer	The day-unique Order Reference Number assigned by NASDAQ to this order
Capacity	55	1	Alpha	The capacity specified on the order
Intermarket Sweep Eligibility	56	1	Alpha	"Y" = eligible "N" = not eligible "y" = Trade-at Intermarket Sweep Order
Minimum Quantity	57	4	Integer	Minimum number of shares to execute on the replacement.
Cross Type	61	1	Alpha	The Cross Type as entered
Order State	62	1	Alpha	"L" = Order Live "D" = Order Dead

3.2.2 Replaced Message

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

Replaced Message				
Name	**Offset**	**Len**	**Value**	**Notes**
Message Type	0	1	"U"	"U" – Replaced Message Identifier
Timestamp	1	8	Integer	Timestamp – reflected as the number of nanoseconds past midnight.
Replacement Order Token	9	14	Alpha-numeric	The Replacement Order Token field as entered
Buy/Sell Indicator	23	1	Alpha	Buy/sell indicator as entered on the original order in the chain
Shares	24	4	Integer	Total number of shares outstanding
Stock	28	6	Alpha	Stock symbol as entered on the original
Price	34	4	Integer	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.
Time in Force	38	4	Integer	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.
Firm	42	4	Alpha	The accepted firm for the original order.
Display	46	1	Alpha	The accepted display type for the order. "A" = Attributable - Price to Display "I" = Imbalance-Only "N" = Non-Display "Y" = Anonymous - Price to Comply "Z" = Entered as displayed but changed to non-displayed (Priced to comply) "M" = Mid-Point Peg "W" = Mid-Point Peg Post Only "m" = Mid-Point Peg and Mid-Point Trade Now

				"n" = Non-Display and Mid-Point Trade Now "B" = M-ELO and Continuous Book Midpoint
Order Reference Number	47	8	Integer	The day-unique Order Reference Number assigned by NASDAQ to this order
Capacity	55	1	Alpha	The Capacity of original order.
Intermarket Sweep Eligibility	56	1	Alpha	"Y" = eligible "N" = not eligible "y" = Trade-at Intermarket Sweep Order
Minimum Quantity	57	4	Integer	Minimum number of shares to execute on the replacement.
Cross Type	61	1	Alpha	The Cross Type of the replacement
Order State	62	1	Alpha	"L" = Order Live "D" = Order Dead
Previous Order Token	63	14	Token	The Order Token of the order that was replaced

3.2.3 Canceled Message

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.

Canceled Message				
Name	**Offset**	**Len**	**Value**	**Notes**
Message Type	0	1	"C"	Canceled Order Message
Timestamp	1	8	Integer	Timestamp – reflected as the number of nanoseconds past midnight.
Order Token	9	14	Token	The Order Token of the order being reduced
Decrement Shares	23	4	Integer	The number of shares just decremented from the order. This number is incremental, not cumulative.
Reason	27	1	Alpha	Reason the order was reduced or canceled. See currently supported Cancel Order Reasons below. Clients should anticipate additions to this list and thus support all capital letters of the English alphabet.

3.2.3.1 Cancel Order Reasons

Cancel Order Reasons	
Reason	**Explanation**
"U"	User requested cancel. Sent in response to a Cancel Order Message or a Replace Order Message
"I"	Immediate or Cancel order. This order was originally sent with a timeout of zero and no further matches were available on the book so the remaining unexecuted shares were immediately canceled

"T"	Timeout. The Time In Force for this order has expired
"S"	Supervisory. This order was manually canceled or reduced by a NASDAQ supervisory terminal. This is usually in response to a participant request via telephone.
"D"	This order cannot be executed because of a regulatory restriction (e.g.: trade through restrictions).
"Q"	Self Match Prevention. The order was cancelled because it would have executed with an existing order entered by the same MPID.
"Z"	System cancel. This order was cancelled by the system.
"C"	Cross canceled. Non-bookable cross orders that did not execute in the cross.
"K"	This order cannot be executed because of Market Collars
"H"	Halted. The on-open order was canceled because the symbol remained halted after the opening cross completed.
"X"	Open Protection. Orders that are cancelled as a result of the Opening Price Protection Threshold.
"E"	Closed. Any DAY order that was received after the closing cross is complete in a given symbol will receive this cancel reason.
"F"	Post Only Cancel. This Post Only order was cancelled because it would have been price slid for NMS.
"G"	Post Only Cancel. This Post Only order was cancelled because it would have been price slid due to a contra side displayed order on the book.

3.2.4 AIQ Cancelled Message

AIQ Cancelled Message				
Name	**Offset**	**Len**	**Value**	**Notes**
Message Type	0	1	"D"	Canceled Order Message
Timestamp	1	8	Integer	Timestamp – reflected as the number of nanoseconds past midnight.
Order Token	9	14	Token	The Order Token of the order being reduced
Decrement Shares	23	4	Integer	The number of shares just decremented from the order. This number is incremental, not cumulative.
Reason	27	1	"Q"	Reason the order was reduced or canceled. For AIQ Cancel message, this value will be "Q".
Quantity Prevented from Trading	28	4	Integer	Shares that would have executed if the trade would have occurred
Execution price	32	4	Integer	Price at which the trade would have occurred
Liquidity flag	36	1	Alpha	Liquidity flag the order would have received

3.2.5 Executed Message

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

Executed Message				
Name	**Offset**	**Len**	**Value**	**Notes**
Message Type	0	1	"E"	Order Executed Message
Timestamp	1	8	Integer	Timestamp – reflected as the number of nanoseconds past midnight
Order Token	9	14	Token	The Order Token of the executing order
Executed Shares	23	4	Integer	Incremental number of shares executed
Execution Price	27	4	Integer	The price at which these shares were executed
Liquidity Flag	31	1	Alpha	See Liquidity Flag Values table below.
Match Number	32	8	Integer	Assigned by NASDAQ to each match executed. Each match consists of one buy and one sell. The matching buy and sell executions share the same match number.

3.2.5.1 Liquidity Flags

Liquidity Flags	
Flag	***Value***
A	Added
R	Removed
O	Opening Cross
M	Opening Cross (imbalance-only)
C	Closing Cross
L	Closing Cross (imbalance-only)
H	Halt/IPO Cross
K	Halt Cross
J	Non-displayed adding liquidity
N	Passive Midpoint Execution
W	Added post-only
m	Removed liquidity at a midpoint
k	Added liquidity via a midpoint order
0	Supplemental order execution
7	Displayed, liquidity-adding order improves the NBBO
8	Displayed, liquidity-adding order sets the QBBO while joining the NBBO
4	Added displayed liquidity in a Group A symbol
5	Added non-displayed liquidity in a Group A symbol
6	Removed liquidity in a Group A symbol
g	Added non-displayed mid-point liquidity in a Group A symbol
n	Midpoint Extended Life Order execution

3.2.6 Broken Trade Message

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.

Broken Trade Message				
Name	**Offset**	**Len**	**Value**	**Notes**
Message Type	0	1	"B"	Broken Trade Message
Timestamp	1	8	Integer	Timestamp – reflected as the number of nanoseconds past midnight.
Order Token	9	14	Token	The Order Token of the order for which the given Match Number is being broken.
Match Number	23	8	Integer	Match Number as transmitted in the Executed Order Message being broken.
Reason	31	1	Alpha	The reason the trade was broken. See currently supported Broken Trade Reasons table below. Clients should anticipate additions to this list and thus support all capital letters of the English alphabet.

3.2.7 Broken Trade Reasons

Broken Trade Reasons	
Reason	**Explanation**
"E"	Erroneous — The trade was deemed clearly erroneous.
"C"	Consent — The two parties mutually agreed to break the trade.
"S"	Supervisory — The trade was manually broken by a NASDAQ supervisory terminal.
"X"	External — The trade was broken by an external third party.

3.2.8 Price Correction Message

A Price Correction Message informs you that an execution has been price-corrected.

You will always get an Executed Order Message prior to getting a Price Correction Message for a given order/execution.

Price Correction Message				
Name	**Offset**	**Len**	**Value**	**Notes**
Message Type	0	1	"K"	Price Correction Message
Timestamp	1	8	Integer	Timestamp – reflected as the number of nanoseconds past midnight.
Order Token	9	14	Token	The Order Token of the order for which the given Match Number is being adjusted
Match Number	23	8	Integer	Match Number as transmitted in the Executed Order Message being adjusted
New Execution Price	31	4	Integer	The corrected price of the execution
Reason	35	1	Alpha	The reason the trade was corrected. See Price Correction Reasons table

				below.

Price Correction Reasons	
Reason	**Explanation**
"E"	Erroneous — The trade was deemed clearly erroneous.
"C"	Consent — The two parties mutually agreed to correct the price.
"S"	Supervisory — The trade was manually price-corrected by a NASDAQ supervisory terminal.
"X"	External — The trade was price-corrected by an external third party.

3.2.9 Rejected Message

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 Token of a Rejected Message cannot be re-used.

Rejected Order Message				
Name	**Offset**	**Len**	**Value**	**Notes**
Message Type	0	1	"J"	Rejected Order Message
Timestamp	1	8	Integer	Timestamp – reflected as the number of nanoseconds past midnight
Order Token	9	14	Token	Order Token field as was entered.
Reason	23	1	Alpha	The reason the order was rejected. See currently supported Rejected Order Reasons below. Clients should anticipate additions to this list and thus support all capital letters of the English alphabet.

3.2.10 Rejected Order Reasons

Rejected Order Reasons	
Reason	**Explanation**
"T"	Test Mode — This OUCH Account is configured for test mode and is not able to accept orders in non-TEST securities.
"H"	Halted — There is currently a trading halt so no orders can be accepted in this stock at this time.
"Z"	Shares exceeds configured safety threshold — The number of shares entered must be less than the safety threshold configured for this Account. The safety threshold can be added/updated through NASDAQ Subscriber Services.
"S"	Invalid stock — The stock field must be a valid issue, tradable on NASDAQ.
"D"	Invalid Display Type — Sent when Display Type Entered cannot be accepted in current circumstances and can't be simply converted to a valid Display Type.
"C"	NASDAQ is closed.
"L"	Requested firm not authorized for requested clearing type on this account — To authorize additional firms, use the NASDAQ Service Bureau Agreement.
"M"	Outside of permitted times for requested clearing type
"R"	This order is not allowed in this type of cross (stock or time restrictions).

"X"	Invalid price
"N"	Invalid Minimum Quantity
"O"	Other
"W"	Invalid Mid-point Post Only Price
"o"	There is no reference price in the first NOII dissemination and so no LOC orders can be accepted in this stock at this time
"q"	Midpoint Peg orders are not accepted in a crossed market
"u"	LOC Order priced more aggressively than the first NOII reference price

3.2.11 PRM Rejected Order Reasons

PRM Rejected Order Reasons	
Reason	***Explanation***
"a"	Reject All enabled
"b"	Easy to Borrow (ETB) reject
"c"	Restricted symbol list reject
"d"	ISO order restriction
"e"	Odd lot order restriction
"f"	Mid-Point order restriction
"g"	Pre-Market order restriction
"h"	Post market order restriction
"i"	Short sale order restriction
"j"	On Open order restriction
"k"	On Close order restriction
"l"	Two sided quote reject
"m"	Exceeded shares limit
"n"	Exceeded dollar value limit

3.2.12 Cancel Pending Message

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 token. Duplicate cancel requests for the same token will be ignored by OUCH.

Cancel Pending Message				
Name	**Offset**	**Len**	**Value**	**Notes**
Message Type	0	1	"P"	Cancel Pending Message
Timestamp	1	8	Integer	Timestamp – reflected as the number of nanoseconds past midnight
Order Token	9	14	Token	Order Token for the order that has its cancel pended

3.2.13 Cancel Reject Message

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 token. Duplicate cancel requests for the same token will be ignored by OUCH.

Cancel Reject Message				
Name	**Offset**	**Len**	**Value**	**Notes**
Message Type	0	1	"I"	Cancel Reject Message
Timestamp	1	8	Integer	Timestamp – reflected as the number of nanoseconds past midnight.
Order Token	9	14	Token	Order Token for the order that was cancel-rejected

4 Support

If you have any questions or comments about this specification, email tradingservices@nasdaq.com. We welcome suggestions for new features or improvements.

4.1 Revision History

Revision #	Date	Change
4.0	02/23/2009	Initial document
4.0	05/06/2009	Added Display value "S" Added Display value "F" Revised descriptions of liquidity flags "J"
4.0	06/05/2009	Revised description of cancelled order reason "T" for anti-internalization
4.0	06/24/2009	Revised description of cancelled order reason "I" for anti-internalization Revised description of cancelled order reason "T" for removing anti-internalization
4.0	07/01/2009	Revised description of cancelled order reason "I" for removing anti-internalization Added cancelled order reason "Q" for anti-internalization
4.0	08/10/2009	Removed Display value "S" Removed Display value "F" Revised descriptions of liquidity flags "J" to remove flash reference
4.0	12/10/2009	Revised anti-internatization language, replaced with self match prevention.
4.0	04/16/2010	Added display value "M" for mid-point pegging
4.0	08/12/2010	Re-introduced the sell short exempt value in the buy sell indicator field
4.0	11/29/2010	Added display value "W" for mid-point peg post only order
4.0	04/04/2011	Revised PRM reject reason code Revised description of shares field for replace message
4.0	08/01/2011	Added display value "L" for Post-Only and Attributable – Price to Display

4.0	10/04/2011	Removed IOC requirement for minimum quantity orders Added AIQ cancelled message type Removed Cross type value "I" Removed display values "P"."L" from order accepts and order replace messages
4.0	03/06/2012	Added cross type value "S" for supplemental orders Added liquidity flag value "0" for supplemental order executions
4.0	03/08/2012	Added default value for capacity field Removed legacy value "R" from display field Removed legacy value "I" from liquidity flag field
4.0	04/19/2012	Added cancel reason "Z" Added liquidity flag values "k", "m" for midpoint executions
4.0	10/23/2012	Added liquidity flag values "7", "8"
4.0	01/28/2013	Added liquidity flag values "6"
4.0	06/09/2014	Updated the formatting of the document to make more standardized across the specs
4.0	01/15/2015	Added Liquidity flag values "0", "4", "5", "g" Modified the definitions of liquidity flag values "M", "L", "K" Added cancel order reason "C"
4.0	03/23/2015	Added cancel reasons "E", "X"
4.0	06/04/2015	Added reject order reason "W"
4.0	06/08/2015	Greyed out cancel order reasons "E", "X"
4.0	06/23/2015	Updated description for cancel reason "E" Removed cancel reason "X"
4.0	12/23/2015	Added cancel reasons "H", "K", "X"
4.0	01/11/2016	Revised description of Liquidity flag values "4", "5", "6", "g" Added Liquidity flag values "a", "x", "y"
4.0	02/29/2016	Added Liquidity flag values "b", "c", "h", "N" Revised description of Liquidity flag values "a", "x", "y"
4.0	07/18/2016	Added intermarket sweep eligibility value "y"
4.0	05/02/2017	Added cancel reason "F" and "G"
4.0	07/20/2017	Added "o" to reject reason code
4.0	09/26/2017	Added "E" to cross type and "n" to liquidity flag to support Midpoint Extended Life Order
4.0	09/28/2017	Added value "Q" to rejected order reasons
4.0	10/02/2017	Revised reject value "Q" to "q"
4.0	10/20/2017	Ungreyed reject value "q"
4.0	03/01/2018	Removed following liquidity flags: a, x, y, b, c, h and N
4.0	03/15/2018	Ungreyed cross type "E" and liquidity flag "n"
4.0	07/06/2018	Added reject reason code "u"
4.0	12/07/2018	Added display value "m" and "n"
4.0	07/08/2019	Added display value *"B" = M-ELO and Continuous Book Midpoint*
4.0	11/12/2019	Added value "N" to liquidity flag