

Order Type Differences

Unsupported Values in Messages	
Current	<ul style="list-style-type: none"> Unsupported values sent in any tag are ignored by NYSE Arca. Max Price supported for order entry is \$ 99,999.99.
Pillar	<ul style="list-style-type: none"> Any value sent in a tag that is not specifically supported in the spec will cause orders, cancels, cancel/replace and modify messages to reject. The following examples have been observed to date. <ul style="list-style-type: none"> MaxFloor may not be an oddlot, mixed lot or zero. Quantity may not contain a decimal Market Orders may not have TIF of IOC Proactive If Locked Tag 9733 may not equal N Max Price supported for order entry is based on the binary u32 limitation in XDP for price: Price scale for individual securities is published in the XDP Symbol Index Mapping Message. <ul style="list-style-type: none"> Max price for securities with a price scale of 6 is \$4,294.67296. Max price for securities with a price scale of 4 is \$429,467.296. Any price above these maximums will be rejected.

ALO Orders	
Current	<ul style="list-style-type: none"> If marketable on entry, order will reject. Can be odd-lot sized. Reserve Quantity allowed.
Pillar	<ul style="list-style-type: none"> Must be at least 1 round lot in size on entry or they will be rejected. Can be partially executed or cancelled to less than 1 round lot. Can lock an undisplayed odd lot. ALO Orders will re-price similarly to Arca Only Orders in order to avoid routing. An ALO Order that crosses non-displayed interest, excluding MPL, and can receive price improvement will execute and be billed as a taker. If an ALO Order would lock non-displayed interest, it will display at the locking price. A resting Arca Only Order or Non-Display Limit Order designated with a Non-Display Remove Modifier will trade as the liquidity taker against an arriving ALO order that locks the undisplayed price of the resting order. After evaluation against non-displayed interest, ALO Orders crossing contra-side Arca displayed interest will re-price and display at 1 MPV worse than the contra-side interest. ALO Orders that only cross away market quotes will display one MPV worse than the contra-side interest but have a working price equal to the contra-side PBBO. ALO orders will be evaluated for re-pricing or trading with each change of contra side PBBO. Reserve Quantity is not supported.

PNP and PNPB Orders	
Current	<ul style="list-style-type: none"> • PNP orders that lock or cross the PBBO will cancel. • PNP B orders that lock or cross the PBBO will display at 1 MPV worse than the price of the contra side PBBO with a working price at the price of the PBBO. • PNP ALO with Reserve is supported.
Pillar	<ul style="list-style-type: none"> • Will be renamed as 'Arca Only Order'. • Arca Only orders will follow the processing behavior of the current PNP B order. • Will have a new option to add a Non-Displayed Remove Modifier to an Arca Only Order that would execute as the liquidity taker when the non-displayed price of an Arca Only Order is locked by an arriving ALO Order. • PNP and PNPB will both be converted into Arca Only within Pillar. Pillar will not support order behavior for PNP. • To utilize the Non-Displayed Remove Modifier, Tag 9733/Proactive if Locked can be populated with Y or 2. This instruction would allow a resting Arca Only locked by an Arca Only ALO order to execute. A value of "2" will allow Non-Displayed Remove and will re-price at the LULD bands • PNP ALO with Reserve will reject.

MPL Orders	
Current	<ul style="list-style-type: none"> • Only available for execution at the midpoint. • Supports a Minimum Trade Size (MTS). When the specified MTS is greater than the leaves quantity of the order, the MTS validation turns off. • MPL with MTS does not evaluate aggregate size at arrival.
Pillar	<ul style="list-style-type: none"> • On arrival, can execute at better prices up to the midpoint of the PBBO. • Once resting at the midpoint, it will only be available for execution at the midpoint • Supports a Minimum Trade Size (MTS). When the specified MTS is greater than the leaves quantity of the order, the balance of the order will be cancelled. If on arrival, the MTS is larger than the size of the order, it will be rejected. • MPL with MTS will evaluate aggregate contra side liquidity upon arrival and individual volume once resting. • On arrival, MPL ALO orders can remove liquidity at prices up to but not including the midpoint.

MPL with Proactive If Locked Instruction Behavior	
Current	<ul style="list-style-type: none"> • MPL and MPL ALO orders can set 9733/'Proactive if Locked' equal to "Y" for the option to remove instead of remaining passive and allowing a lock at the midpoint.
Pillar	<ul style="list-style-type: none"> • Proactive If Locked will be renamed 'Non-Displayed Remove Modifier'. • Will remain optional to allow MPL and MPL ALO orders to trade when MPL ALO would remove liquidity. • 9733/'Proactive if Locked' may be entered as "Y" or "2". A value of "2" will allow Non-Displayed Remove and will re-price at the LULD bands

PL Orders	
Current	<ul style="list-style-type: none"> Ranked behind all other non-displayed interest, and then ranked in time sequence if multiple PL orders are present.
Pillar	<ul style="list-style-type: none"> Will be renamed as 'Non-Displayed Limit Order'. Will rank in time sequence with all other non-displayed interest. If designated with a Non-Display Remove Modifier, will trade with contra-side Arca Only ALO Order as the taker. Tag 9733/'Proactive if Locked' can be equal to "Y" or "2" to support non-display remove functionality

Market and Primary Peg Orders	
Current	<ul style="list-style-type: none"> Use the National Best Bid and Offer (NBBO) as the reference price. Peg Orders entered when there is no or one sided NBBO are accepted but cannot trade until there is a two sided NBBO. Market and Primary Peg orders may not be entered before 9:30. Market and Primary Peg orders may be sent with reserve. Primary Pegs may be sent with an offset. Market Peg orders do not require a price, require an 'Offset' price and are displayed at their pegged price. Sell Short Market and Primary Peg orders are cancelled during an SSR.
Pillar	<ul style="list-style-type: none"> Will use the Protected Best Bid and Offer (PBBO) as the reference price. PBBO does not contain the side of the PBBO the orders peg to: <ul style="list-style-type: none"> Newly arriving peg orders will be rejected and resting pegs will be cancelled During an SSR, all Pegged Orders will peg to the NBBO and will not be rejected or cancelled. Primary Peg orders may be entered at any time and can participate in the Core Open Auction at their limit price. Market Peg Orders may only be entered after the Core Open Auction. Market Peg Orders will require a price, will offer an optional 'Offset' price, will always be un-displayed, and will not participate in auctions. Only Primary Peg Orders may be sent with reserve; Market Peg Orders may not have reserve quantity. Only Market Peg Orders may be sent with an offset. Primary Peg Orders may not have an offset. Pegged Orders behave as described below when the PBBO is locked/crossed: <ul style="list-style-type: none"> Newly arriving Primary Peg Orders will be rejected. Resting Primary Peg Orders will remain at the last pegged price before the locked/crossed PBBO and be eligible for execution. Newly arriving Market Peg Orders will be accepted but not eligible to peg or trade. Resting Market Peg Orders will remain at the last pegged price before the locked/crossed and will not be eligible to trade. Primary Peg Orders must display at least one round lot and can include a reserve quantity.

Opening, Closing and Primary Only Orders	
Current	<ul style="list-style-type: none"> • MOO, LOO, MOC and LOC orders in securities that are not eligible for an auction on Arca are rejected, unless designated as a Primary Only Order. • Do not accept MOO and LOO orders for Trading Halt Auctions. • Current behavior will reject MOC and LOC if sent before the start of session 2 • MOC and LOC orders may be entered with TradingSessionID = 12, 123, or 23.
Pillar	<ul style="list-style-type: none"> • Will route any MOO, LOO, MOC and LOC orders in securities that are not eligible for an auction on Arca to the primary market. Primary Only instruction is not necessary, but still accepted. • Will accept MOO and LOO Orders for Trading Halt Auctions. • MOC and LOC may be entered starting at 3:30 am ET. • MOC and LOC may be entered with TradingSessionID = 2 or blank

Retail Taker Orders	
Current	<ul style="list-style-type: none"> • Retail Taker Order Type 1 and 2 submission is monitored on a post trade basis. • Retail Taker Orders can choose to bypass midpoint liquidity.
Pillar	<ul style="list-style-type: none"> • Retail Taker Order Type 1 and 2 submission will be validated upon order entry. • Retail Taker Orders cannot bypass midpoint liquidity.

Self-Trade Prevention (STP)	
Current	<ul style="list-style-type: none"> • STP is not available for Tracking Orders.
Pillar	<ul style="list-style-type: none"> • STP will be available for Tracking Orders.

IOC Orders	
Current	<ul style="list-style-type: none"> • Does not support a 'Minimum Quantity'.
Pillar	<ul style="list-style-type: none"> • Limit IOC Orders that do not route will support an optional 'Minimum Quantity' that will evaluate against all marketable contra-side interest (displayed and non-displayed), or else it will cancel. • Optional 'Minimum Quantity' must be at least one round lot. • NOW Order will now be called a "Limit Routable IOC Order."

Eliminated and Deferred Order Types	
Current	<ul style="list-style-type: none"> • Auto Market Maker Q orders are supported. • Good Till Cancelled (GTC) and Good Till Date (GTD) orders are supported. • Limit orders, Market and Primary Pegs can include a discretionary price.
Pillar	<ul style="list-style-type: none"> • Auto Market Maker Q orders will be rejected. • Good Till Cancelled (GTC) and Good Till Date (GTD) orders will be rejected. • Discretionary Orders will not be supported in Phase I

Order Processing Differences

ClientOrderID on cancel or modify messages	
Current	<ul style="list-style-type: none"> Cancel, cancel/replace or Modify messages with OrderID populated are accepted and processed. If OrderID is not populated, the original ClientOrderID is used to look up the original order.
Pillar	<ul style="list-style-type: none"> Cancel, Cancel/Replace and Modify messages MUST contain the original ClientOrderID. Cancels, Cancel/Replaces and Modify messages without the original ClientOrderID will be rejected.

Repricing of Resting Limit Orders	
Current	<ul style="list-style-type: none"> When current BB(BO) is locked or crossed by an Away Market PBB(PBO) and the current Arca BB(BO) executes or cancels, the next best resting Limit Orders will stand their ground.
Pillar	<ul style="list-style-type: none"> When current BB(BO) is locked or crossed by an Away Market PBB(PBO) and the current Arca BB(BO) executes or cancels, the next best resting Limit Orders will reprice in order to prevent those orders from becoming a BBO that would lock or cross the PBBO. Resting Limit Orders would be assigned a display price one MPV below (above) the PBO(PBB) and a working price equal to the PBO(PBB). If a Day ISO to buy(sell) arrives at a price at or above(below) the Away Market PBO(PBB); <ul style="list-style-type: none"> and the quantity of the DAY ISO that would post is at least a round lot quantity, it will post at its limit price and all resting orders will reprice to their limit prices or the price of the ISO, whichever is more restrictive and the quantity of the DAY ISO that would post is an odd lot quantity, it would be assigned a display prices one MPV below(above) the PBO(PBB) and a working price equal to the PBO(PBB).

Reserve Orders	
Current	<ul style="list-style-type: none"> Replenished only after the displayed quantity is fully executed. Replenished amount receives a new time priority and keeps the same OrderID. Reserve can be combined with DAY ISO order type.
Pillar	<ul style="list-style-type: none"> Replenished after each execution, even if less than the displayed quantity. Replenished amount receives a new time priority and receives a new OrderID. Upon full replenishment, reserve orders will be evaluated for routing when there is less than round lot quantity left at the replenished price level During an SSR, the unexecuted displayed portion of a reserve order would retain its original OrderID. Any replenished quantities would re-price one MPV above NBB and receive a new time priority and OrderID. DAY ISO orders with reserve will reject.

Cancel and Cancel Replace Handling

<p>Current</p>	<ul style="list-style-type: none"> • Fast Cancel Replace messages are accepted. • Cancel Replace orders are only allowed to modify a restricted set of order parameters. • Cancel Replace orders retain priority and the same OrderID when quantity is reduced, Side is changed from S to SS or SSE, or TIF, Execlnst, PegDifference, TradingSessionID or MinQty is changed. • If a Cancel or Cancel Replace order is rejected, the order status (cOrdStatus) on FIX message 9 will denote the actual order status (e.g. 1=executed) at the time of the reject. • For Bulk Cancel messages a pending cancel message will be sent for any order that cannot be immediately cancelled due to the freeze period before an auction or if the order is currently routed to another market. • When the order quantity on a cancel replace message is less than the executed quantity on the original order: <ul style="list-style-type: none"> ○ If the cancel replace can be processed immediately, the leaves on original order is cancelled and the cancel replace message gets rejected ○ If the cancel replace cannot be processed immediately, the original order gets replaced with zero leaves, and the cancel replace message is rejected
<p>Pillar</p>	<ul style="list-style-type: none"> • Fast Cancel Replace messages will be rejected. • Cancel Replace orders will allow all order parameters to be changed with the exception of symbol and side from B to S or vice versa. <ul style="list-style-type: none"> ○ The following fields cannot be changed from original order to cancel/replace as they are copied from the original order message: <ul style="list-style-type: none"> ▪ Execlnst - cannot change to or from 'f', but can change other values ▪ ExecBroker ▪ ExtendedExeclnst • Cancel Replace orders that reduce quantity or modify the Side from S to SS or SSE will retain time priority and OrderID. All other modifications will result in a new time priority and OrderID. • If a Cancel or Cancel Replace order is rejected, the order status (cOrdStatus) on FIX message 9 will always be set to 8 (rejected). • For Bulk Cancel messages no pending cancel message will be sent for any order that cannot be immediately cancelled. • When the order quantity on a cancel replace is less than the executed quantity on the order being replaced, the original order will get replaced with zero leaves regardless of whether the cancel replace can be processed immediately or not.

Cancel/Replace Reject Logic	
Current	<ul style="list-style-type: none"> • If a cancel replace gets rejected by UTP, the original order remains on the Order Book, and subsequent cancel or cancel replace messages can be sent for that order.
Pillar	<ul style="list-style-type: none"> • If a cancel replace gets rejected by the gateways, the original order remains on the Order Book, and subsequent cancel or cancel replace messages can be sent for that order. • If the cancel replace gets rejected because the replacement order failed validations at the matching engine, the message is rejected and the original order will be cancelled from the Order Book. Exceptions apply when: <ul style="list-style-type: none"> ○ an auction only order type during the imbalance freeze ○ a MOC/LOC order in a NYSE or NYSE MKT listed security when submitted after 3:45

LULD Band Behavior	
Current	<ul style="list-style-type: none"> • Default behavior cancels orders that would execute through the bands. Only some order types can be re-priced for LULD bands.
Pillar	<ul style="list-style-type: none"> • Default behavior in Phase I will be to cancel orders that would execute through the bands. All Limit Orders will be eligible to re-price except: <ul style="list-style-type: none"> ○ If entered with re-pricing instructions, MPL, MPL ALO, and MPL RPI will not re-price, but will be held undisplayed until the midpoint of the PBBO is at or within the LULD bands. ○ Cross orders priced through an LULD band will reject regardless of re-pricing instructions • Auction Order Types will ignore LULD bands • Market and Retail Taker 2 Market orders, DAY ISO or any order with TIF IOC, will sweep and cancel for LULD regardless of instructions • Resting ISO orders with a limit price through LULD bands will cancel.

Limit Order Price Checks	
Current	<ul style="list-style-type: none"> • Orders are evaluated against the limit order price checks only on arrival. • Orders not eligible for the current session at time of arrival (session 2 orders entered during session 1 or session 3 orders entered during session 2) do not get evaluated against the limit order price checks before being placed on the book.
Pillar	<ul style="list-style-type: none"> • Orders not eligible for the current session at time of arrival (session 2 orders entered during session 1 or session 3 orders entered during session 2) will be evaluated against the limit order price checks prior to being eligible and placed on the book.

Working Price on Incoming Orders	
Current	<ul style="list-style-type: none"> The price at which a new order is working is indicated on order ack for MPL and PNP B orders only in price field. All other order types return limit price in price field.
Pillar	<ul style="list-style-type: none"> The working price for a new order will be included on every new order acknowledgement in price field. The working price for market orders will be returned as 0 if order is not live at entry. Market orders that are live upon entry will return either the contra side NBBO, trading collar or LULD band in price field.

Execution Reports	
Current	<ul style="list-style-type: none"> Execution reports via the FIX format pads the Average Price field with trailing zeros.
Pillar	<ul style="list-style-type: none"> Execution reports via the FIX format will truncate trailing zeros from the Average Price field.

Cancel On Disconnect	
Current	<ul style="list-style-type: none"> Cancellation criteria includes all live and pending orders.
Pillar	<ul style="list-style-type: none"> Cancellation criteria includes all live and pending orders, excluding MOC/LOC.

Busts and Corrections Response	
Current	<ul style="list-style-type: none"> When a trade is busted or corrected, the Text field is populated with "Trade Break" on the unsolicited message to the customer.
Pillar	<ul style="list-style-type: none"> When a trade is busted or corrected, the Text field is populated with the Text of the original fill or partial fill received on the unsolicited message to the customer. The ExecTransType field on the message will correctly reflect the cancellation of the fill or partial fill.

ExecID	
Current	<ul style="list-style-type: none"> Populated on all type 8 messages with a unique, incremented number comprised of the following concatenated values, GTCIndicator + SystemID+ MarketID+ Incrementing Sequence number.
Pillar	<ul style="list-style-type: none"> Populated on fills, partial fills, busts, and corrections, with the following concatenated values, GTCIndicator + SystemID+ MarketID+ DealID of the trade. This will be provided to both sides of a trade. <ul style="list-style-type: none"> In FIX, the unsigned 64 bit representation is copied into the appropriate fields as an ASCII string. In Binary, the unsigned 64 bit representation will be translated into the correct Binary Format for the appropriate field length. On any other message, where ExecID field is present, the value will be zero.

Reject Processing	
Current	<ul style="list-style-type: none"> When an order is rejected or cancelled, a reason text is provided in the response.
Pillar	<ul style="list-style-type: none"> When an order is rejected or cancelled by Pillar, a new numeric reason code along with new reject text will be provided in the response. Example "R028: Invalid Price". When an order is rejected or cancelled at the gateway, existing reject text may be returned. Full list of reason codes to be included in Legacy GW spec update.

Sell Short Restriction (SSR) Handling	
Current	<ul style="list-style-type: none"> The option to cancel a Sell Short order rather than re-price to comply with a Sell Short Restriction (SSR) is evaluated on order arrival.
Pillar	<ul style="list-style-type: none"> The option to cancel a Sell Short order rather than re-price to comply with a Sell Short Restriction (SSR) will be retained for the entire life of the order.

Ranking in RLP Program	
Current	<ul style="list-style-type: none"> Odd-lots at the same price as RPI interest, PL Orders, and MPL Orders are ranked in time priority.
Pillar	<ul style="list-style-type: none"> Odd lots will have priority over same-priced RPI, Non-Display Limit Orders and MPL Orders.

RPI Logic	
Current	<ul style="list-style-type: none"> RPI orders are eligible to trade against Retail Taker interest as long as they provide price improvement over the same side PBBO. <ul style="list-style-type: none"> RPI orders to buy(sell) priced above(below) the PBO(PBB) will have a working price of the PBO(PBB) and be available for execution against Retail Taker interest. RPI orders to buy(sell) priced below(above) the PBB(PBO) will have a working price of the limit price and not be available for execution against Retail Taker interest.
Pillar	<ul style="list-style-type: none"> RPI orders are eligible to trade against Retail Taker interest as long as they provide price improvement over the same side PBBO excluding the contra side PBBO. <ul style="list-style-type: none"> RPI orders to buy(sell) priced above(below) the PBO(PBB) will have a working price of the limit price and not be available for execution against Retail Taker interest. RPI orders to buy(sell) priced below(above) the PBB(PBO) will have a working price of the limit price and not be available for execution against Retail Taker interest.

Re-Opening Auctions in Non Primary Symbols	
Current	<ul style="list-style-type: none"> • Hold trading halt auctions in non-primary symbols.
Pillar	<ul style="list-style-type: none"> • Will no longer hold trading halt auctions in non-primary symbols. • Will wait for the LULD bands from the SIP during Session 2 to resume trading out of any regulatory halt or pause for any non-primary symbol.

Core Auction Reference Price	
Current	<ul style="list-style-type: none"> • Uses Consolidated Round Lot trade to prior to the auction to calculate Auction Collars. • If none, uses previous day's Closing Price to calculate Auction Collars.
Pillar	<ul style="list-style-type: none"> • Uses Midpoint of NBBO to calculate Auction Collars. • If a designated percentage of the midpoint of the NBBO is less than the spread of the NBBO, the NBBO is one-sided or crossed, or there is no NBBO, use the Previous day's closing Price to calculate Auction Collars.

Market Order Auctions	
Current	<ul style="list-style-type: none"> • Orders marked as Session 1 only are eligible for the Market Order Auction. • Primary Peg Orders do not participate in Market Order Auction. • New Session 2 Orders entered after 9:29 that add to the auction imbalance will queue until after auction. They can offset a published imbalance if on the opposite side and imbalance publication will update based on Session 2 orders.
Pillar	<ul style="list-style-type: none"> • The Market Order Auction will be renamed the 'Core Open Auction'. • Orders marked as Session 1 only will not be eligible for the Core Open Auction. • MOO and LOO orders may not be canceled or cancel/replaced after 9:29. • New MOO and LOO orders entered after 9:29:55 will reject. • New Session 2 orders sent during the 5 second Imbalance freeze at 9:29:55 will: <ul style="list-style-type: none"> ○ receive acknowledgement messages including a reason text Pending-Imbalance Freeze ○ can offset a Core Open Auction imbalance but will not be displayed in imbalance calculation. ○ non-offsetting will be held in a freeze queue until the auction has finished running. Cancels sent for orders being held in the freeze queue will be processed after to the core open auction • New Session 1/2 orders will be accepted at any time and can add to or flip an imbalance. Imbalance publication will reflect new Session 1/2 orders. • Primary Peg orders will be eligible for the Core Open Auction at their limit price and will be included in the indicative match price at their limit price.

Trading Session Tags	
Current	<ul style="list-style-type: none"> Trading Session ID tag can be sent during any session in any order.
Pillar	<ul style="list-style-type: none"> Trading Session ID must be sent in sequential order i.e. 123. Trading Session ID will be rejected if Trading Session has passed for day, i.e. sending Session 1 only during Session 2.

Market Data Changes

Granularity Change for XDP	
Current	<ul style="list-style-type: none"> Timestamps on XDP feeds currently populate microseconds only but field includes zeros out to the nanosecond.
Pillar	<ul style="list-style-type: none"> Timestamps on XDP feeds will populate nanoseconds however the field length will remain the same.

Reporting to SIP	
Current	<ul style="list-style-type: none"> When Arca opens for the Core Session on a quote, the first trade of the Core Session is reported to the SIP with trade condition "O" IPO Auctions are reported as individual executions to the SIP with a Re-Opening Auction Indicator.
Pillar	<ul style="list-style-type: none"> When Arca opens for the Core Session on a quote, the first trade of the Core Session will be reported as a regular trade, with an additional non volume counting report of the trade details sent with a trade condition of "Q" to indicate Arca's official opening price. IPO Auctions are reported to the SIP as a single execution with a Opening Auction Indicator.

Symbol Clear for XDP	
Current	<ul style="list-style-type: none"> When an symbol clear is completed, Type 100 add messages are sent for all live orders.
Pillar	<ul style="list-style-type: none"> When a symbol clear is completed, Type 106 Refresh Add messages will be sent for all live orders.

Closing Auction Order Executions in XDP

<p>Current</p>	<ul style="list-style-type: none"> When an order partially executes in an auction, an execution message, a trade message and a modify message are sent prior to the session transition message indicating the partial execution. <p>Messages Published for Partial execution in an auction</p> <ul style="list-style-type: none"> Execute Trade Modify Session Change <ul style="list-style-type: none"> When an order fully executes in an auction, an execution message, a trade message and a delete message are sent prior to the session transition message indicating the full execution. <p>Messages Published for Full execution in an auction</p> <ul style="list-style-type: none"> Execute Trade Delete Session Change
<p>Pillar</p>	<ul style="list-style-type: none"> When an order executes in the opening auction, the current rules above apply. When an order that is eligible for the next session executes in a closing auction, the current rules above apply. When an order that is not eligible for the next session executes in a closing auction, an execution message and a trade message are sent prior to the session transition message indicating the execution. No modify or delete message will be sent. <p>Messages Published for partial or full execution in a closing auction of an order not eligible for the next session</p> <ul style="list-style-type: none"> Execute Trade Session Change