1.0 Direct Edge Guide to Order Types

1.1. Non-Routable (Book Only) Order Types

- Midpoint Match® (MPM) orders
- Pegged orders
- Day ISOs
- Discretionary (non-displayed) price range (for orders with a Discretionary price instruction, only the Displayed price portion of the order is eligible to route).

1.1.1. Order Attributes for Non-Routable Orders

1. <u>Pegged</u>

   Pegging Methods:

   a. *Primary*
   Order pegs to the same side of the NBBO. Buy orders track the national best bid and Sell orders track the national best offer.

   b. *Market*
   Order pegs to and offsets from the opposite side of the NBBO. Buy orders track and offset from the national best offer and Sell orders track and offset from the national best bid.

   c. *Midpoint*
   Order pegs to the midpoint of the NBBO. Valid on EDGA ONLY.

   With each re-price of a pegged order, the order will be re-booked with a new timestamp and order book priority.

2. <u>Display Status</u>
   Orders may be designated as Displayed or Hidden. Certain order types are Non-Displayed by default (MPM – EDGX Only, Midpoint Pegged – EDGA Only, and Odd Lots).

3. <u>Reserve</u>
   Orders include a Displayed size and a hidden Reserve size. Once designated Display quantity is exhausted it will continue to be replenished in static or random intervals until total Reserve quantity is exhausted.

4. <u>Minimum Trade Quantity</u>
   Sets minimum trade quantity for a given execution.

5. <u>Discretionary Price Range</u>
   Orders entered with discretion will execute at a primary, displayed price as well as up to or down to a hidden, discretionary price. The discretionary price range is non-routable.

6. <u>Midpoint Match (MPM)</u>
   Orders designated as MPM will be non-displayed and always execute at the midpoint of the NBBO. Valid on EDGX Exchange ONLY. MPM orders cannot be designated as Post Only.

7. <u>Post Only</u>
   Post Only instruction valid on EDGX Only. Hidden orders marked "Post Only" will not remove liquidity unless the order receives price improvement and executes at the mid-point of the NBBO against an MPM (or other price improved contra order). In this instance, a Hidden Post Only order will be charged the MPM fee.

Displayed Post Only orders will pay a Taker fee if "Hide Not Slide" is selected as the re-pricing option (also the default re-pricing option), and price improvement is received on the execution.

8. Hide Not Slide
If, upon entry, a Hide Not Slide order is locking or crossing the NBBO, it will be ranked at the locking price and displayed 1 tick worse than the contra quote. This order retains its book priority until filled, cancelled or expired. Alternative posting options to Hide Not Slide are: Price Adjust (new book priority), Single Re-Price, or Cancel.

1.1.2. Liquidity Flags for Non-Routed (Internal Match) Executions

Execution Type	Liquidity Flag
Add Liquidity to our Book (Tape A)	V
Add Liquidity to our Book (Tape B)	B
Add Liquidity to our Book (Tape C)	Y
Remove Liquidity from our Book (Tapes A)	W
Remove Liquidity from our Book (Tape B & C)	N
Customer Internalization	E
Hidden Orders (EDGA only)	H
Midpoint Match Adder – *Valid on EDGX Only*	MM
Midpoint Match Taker - *Valid on EDGX Only*	MT
Midpoint Match Cross (Same MMID) - *Valid on EDGX Only*	AA

1.2. Routable Order Types

In general, all marketable orders are considered routable unless customers elect specific order instructions to prohibit it as outlined in Section 1.1 "Non-Routable (Book Only) Order ".

1.2.1.Order Attributes for Routable Orders

1. Display Status
   Orders may be designated as Displayed or Hidden. Certain order types are Non-Displayed by default (MPM – EDGX Only, Midpoint Pegged – EDGA Only, and Odd Lots).

2. Reserve Quantity
   Orders include a Displayed size and a hidden Reserve size. Once designated Display quantity is exhausted it will continue to be replenished in static or random intervals until total Reserve quantity is exhausted.

3. Super Aggressive (Lock or Cross)
   Enables a resting routable order that is locked or crossed by an Away market to be lifted from the order book and routed to the market center that is locking/crossing it.

4. Aggressive (Cross Only)
   Enables a resting routable order that is crossed by an Away market to be lifted from the order book and routed to the market center that is crossing it.

5. Delivery Method

   a. **RTC (Default):** Router sweeps Tops of Books of all Displayed market centers for Displayed size *only* at multiple price levels up to and including the order's limit price. Orders will not be oversized and are delivered as ISO IOCs.

   b. **RTI:** Focus on price improvement with individual IOC attempts to *best* priced Displayed quotes only (single price level). Orders delivered as non-ISO IOC.

   c. **RTF:** Focus on immediate execution, where router sweeps Tops of Books of all Displayed market centers and will oversize the order to capture all possible quantity at multiple price levels, up to and including the order's limit price. Orders are delivered as ISO IOCs.

1.2.2.Routing Strategies

Routing strategies dictate how and to which destinations a routable order will route.

1: Destination Specific Routing Strategies

Strategy	Routing Behavior	Returned Liquidity Indicators from Destination Market	
		Execution Type	***Liquidity Flag***
RDOT	Order is DOT Routing eligible, and will: 1. Sweep internal order book, then 2. Non-Displayed (CPI℠) destinations, then 3. Non-Displayed (CLC℠) destinations, then 4. Remainder routes directly to NYSE and,	*Routed to NYSE, removes liquidity*	D
		Routed to NYSE, Adds Liquidity	F
		Routed to AMEX, Removes Liquidity (Tape B only)	X

Strategy	Routing Behavior	Returned Liquidity Indicators from Destination Market: Execution Type	Liquidity Flag
	can be re-routed by NYSE.	*Re-Routed*	R
RDOX	1. Sweeps Internal order book, then 2. Any remainder will route directly to NYSE (DOT) and, by default, will not re-route.	*Routed to NYSE, removes liquidity*	D
		Routed to NYSE, adds liquidity	F
		Routed to AMEX, removes liquidity (Tape B only)	X
IOCX	1. Sweeps internal order book, then 2. Any remainder will route to the Sister Exchange (EDGX if entered on EDGA; EDGA if entered on EDGX)	*EDGX routed to EDGA* *EDGA routed to EDGX*	I
IOCT	1. Sweeps internal order book, then 2. Non-Displayed (CPI) destinations, then 3. Non-Displayed (CLC) destinations, then 4. Any remainder will route to the Sister Exchange (EDGX if entered on EDGA; EDGA if entered on EDGX)	*EDGX routed to EDGA* *EDGA routed to EDGX*	I
ROBA	5. Sweeps internal order book 6. Routes to BATS as IOC	*Routed to BATS, removes liquidity*	K
ROBX	1. Sweeps internal order book 2. Routes to BX as IOC	*Routed To Nasdaq BX (Tape B)*	X
		Routed to Nasdaq BX (Tapes A and C)	C
ROPA	1. Sweeps internal order book 2. Routes to Arca as IOC	*Routed (Tape A & C)*	G
		Routed (Tape B)	X
ROLF	1. Sweeps internal order book 2. Routes to LavaFlow with TIF of IOC or DAY (depending on original order TIF)	*Adds to LavaFlow via ROLF*	M
		Removes from LavaFlow via ROLF	U
INET	1. Sweeps internal order book, then 2. Any unfilled quantity will route to INET and, by default, will not re-route.	*Routed Out*	X
		Routed to Nasdaq, removes liquidity or re-routed by Nasdaq (Tapes A & C)	J
		Added to INET Book	A

Strategy	Routing Behavior	Returned Liquidity Indicators from Destination Market	
		Execution Type	***Liquidity Flag***
		Nasdaq Opening (NOOP)	O
		Re-Routed by Exchange	R
ISAM	Routed directly to NYSE Alternext Must have a TIF of IOC and flagged as ISO.	*Removes from Alternext*	S
ISPA	Routed directly ARCA. Must have a TIF of IOC and flagged as ISO.	*Removes from Arca*	S
ISBA	Routed directly to BATS. Must have a TIF of IOC and flagged as ISO.	*Removes from BATS*	S
ISBX	Routed directly to Nasdaq BX. Must have a TIF of IOC and flagged as ISO.	*Removes from Nasdaq BX*	S
ISCB	Routed directly to CBOE. Must have a TIF of IOC and flagged as ISO.	*Removes from CBOE*	S
ISCX	Routed directly to CHSX . Must have a TIF of IOC and flagged as ISO.	*Removes from CHSX*	S
ISCN	Routed directly to NSX. Must have a TIF of IOC and flagged as ISO.	*Removes from ISCN*	S
ISGA	Routed directly to EDGA Exchange. Must have a TIF of IOC and flagged as ISO.	*Removes from EDGA Exchange*	S
ISGX	Routed directly to EDGX Exchange. Must have a TIF of IOC and flagged as ISO.	*Removes from EDGX Exchange*	S
ISLF	Routed directly to LavaFlow Must have a TIF of IOC and flagged as ISO.	*Removes from LavaFlow*	S
ISNQ	Routed directly to NASDAQ. Must have a TIF of IOC and flagged as ISO.	*Removes from NASDAQ*	S
ISNY	Routed directly to NYSE. Must have a TIF of IOC and flagged as ISO.	*Removes from NYSE*	S
ISTR	Routed directly to TRAC. Must have a TIF of IOC and flagged as ISO.	*Removes from TRAC*	S

2: Multi- Destination Routing Strategies

Strategy	Routing Behavior	Returned Liquidity Indicators	
		Execution Type	***Liquidity Flag***
ROUT	1. Sweeps Internal order book, then 2. Non-Displayed (CPI) destinations, then 3. Non-Displayed (CLC) destinations, then 4. Displayed (Street) destinations	*Routed Out*	X
		Routed to Nasdaq, removes liquidity or re-routed by Nasdaq (Tapes A & C)	J
		Routed to Nasdaq BX (Tapes A & C), removes liquidity	C
		Routed to NYSE, removes liquidity or re-routed by an exchange to NYSE	D
		Routed to ARCA, removes Tapes A & C only	G
		EDGX routed to EDGA *EDGA routed to EDGX*	I
		Odd Lot Routed to ARCA (Tape A and B only)	L
		Nasdaq Opening (NOOP)	O
		Re-Routed by Exchange	R
ROUD	1. Sweeps internal order book, then 2. Non-Displayed (CLC) destinations *Will never route to Displayed (Street) destinations*	*CLC Execution via ROUD*	T
ROUC	Cost Effective routing strategy: 1. Sweeps internal order book, then 2. Non-Displayed (CPI) destinations 3. Non-Displayed (CLC) destinations, 4. BX 5. DOT (NYSE) 6. Any remainder will return to EDGX (regardless of which Exchange it was entered from) as an ROUX order with a TIF of DAY.	*CPI or CLC Execution using ROUC*	Q
		Routes to Nasdaq BX, removes liquidity (Tapes A/C)	C
		Routes to Nasdaq BX, removes liquidity (Tape B)	Q
		Routes to NYSE, removes liquidity using ROUC	Q
ROUE	1. Sweeps internal order book, then 2. Non-Displayed destinations, then 3. Displayed (Street) destinations	*Routed Out*	X
		Routed to Nasdaq, removes liquidity or re-routed by Nasdaq (Tapes A & C)	J
		Routed to Nasdaq BX (Tapes A & C), removes liquidity	C
		Routed to NYSE, removes liquidity or re-routed by an exchange to NYSE	D
		Routed to ARCA, removes Tapes A & C only	G

		EDGX routed to EDGA EDGA routed to EDGX	I
		Odd Lot Routed to ARCA (Tape A and B only)	L
		Re-Routed by Exchange	R
		Routed using ROUE Strategy	T
ROUX	1. Sweeps internal order book, then 2. Displayed (Street) destinations	*Routed Out*	X
		Routed to Nasdaq, removes liquidity or re-routed by Nasdaq (Tapes A & C)	J
		Routed to Nasdaq BX (Tapes A & C), removes liquidity	C
		Routed to NYSE, removes liquidity or re-routed by an exchange to NYSE	D
		Routed to ARCA, removes Tapes A & C only	G
		EDGX routed to EDGA EDGA routed to EDGX	I
		Odd Lot Routed to ARCA (Tape A and B only)	L
		Nasdaq Opening (NOOP)	O
		Routed Out	X
		Re-Routed by destination Exchange	R
ROUQ	1. Sweeps internal order book, then 2. Non-Displayed (CPI) destinations for a shortened time period *Will never route to Displayed (Street) destinations*	*CPI Execution*	Q
ROUZ	1. Sweeps internal order book, then 2. Non-Displayed (CPI) destinations, then 3. Non-Displayed (CLC) destinations *Will never route to Displayed (Street) destinations*	*CPI and/ or CLC Execution w/ ROUZ*	Z

Note:

Enhanced Liquidity Provider (“ELP”) 1 is now called Competition for Price Improvement (“CPI”)

Enhanced Liquidity Provider (“ELP”) 2 is now called Comprehensive Liquidity Check (“CLC”)