

ORDER TYPE & MATCHING LOGIC SUMMARY

2022

Book Priority

- Cortex ATS continuously matches orders in price and time priority, subject to crossing restrictions.
- For the purposes of determining book priority, price is rounded to the nearest permissible increment, within the NBBO in accordance with Regulation NMS. In other words, queue position cannot be improved through sub-tick-increment limit prices or setting the limit price of an order through the far touch.
- There are no Cortex ATS participants that gain matching preference over other participants. There is only one pool of liquidity; Matching priority is not determined by counterparty type.

Order Types

- Cortex ATS supports the following order types and order parameters.
- All trades print at or inside the NBBO.

Order Type	Description
Market Order	Order will match at any price within the NBBO
Limit Order	Order will match at the limit or better
Pegged Order	Market: Far touch or better Mid-point: (Bid+Offer)/2 or better Primary: Near touch
Parameter	Behavior
MinQTY	The minimum contra-side order quantity that can be matched with. Cortex ATS does not aggregate orders to meet MinQTY. By default, when leaves quantity becomes less than MinQTY, MinQTY is reduced to be equal to leaves quantity. Please see the FAQ for more information on Minimum Quantity.
Time-In-Force	IOC: Immediate or Cancel. The order will match with eligible resting contra-side orders and cancel back the balance Day: The order will remain in the book until it is canceled, fully filled or the market closes at 4pm

Market Data

Source of NBBO Feed

- Cortex ATS uses direct exchange feeds as the primary source of NBBO for all protected quotes. The Securities Information Processor (SIP) feeds are used as a secondary source of NBBO and for regulatory status.

Feeds from Cortex ATS

- ATS provides a real time feed to the BNPS Smart Order Router of the aggregate quantity available at the NBBO and the Midpoint of the NBBO in Cortex ATS for any given name.

Matching Permissions

- Please see the [FAQ](#) for a full explanation of the counterparty matching options that are available to participants.
- Clients can choose to apply a different minimum quantity to interactions with the major counter-party groups.
- If two matching orders are not permitted to cross with each other because either or both clients have opted out, then the orders will rest in the book until executed or canceled.

Matching Price

- All trades are printed at or inside the NBBO in accordance with Regulation NMS.

Minimum Execution Size

The minimum execution size in Cortex ATS is 1 share. Cortex ATS will execute orders in odd and mixed lot sizes.

Price Improvement

- As the system default, the ATS provides price improvement to the liquidity taker in a cross where applicable. The taker is defined as the last order to arrive in a cross.
- Price improvement is solely based on possible price improvement with the NBBO. Pricing an order through NBBO does not affect price improvement calculations.

Technical Summary

Matching Engine Location

- The Cortex ATS matching engine is located in the Equinix NY4 datacenter in Secaucus, NJ.

Order Entry Protocol

- Cortex ATS supports order entry via FIX. There is no proprietary protocol available.

Trade Reporting Facility (TRF)

- Cortex ATS reports trades to the NASDAQ TRF (DQ)



CONTACTS

Cortex Equities Americas
cortex.equities.amrs@bnpparibas.com
+1-212-841-3600

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