

# **E-COMMERCE**

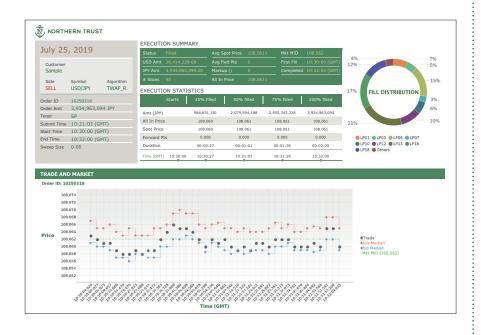


A suite of fully customizable algorithms designed to execute your preferred strategy while leveraging access to a unique liquidity panel for transparency and competitive pricing.

Northern Trust's FX Algo suite provides algorithmic trading supported by a sophisticated liquidity panel connecting you to banks and electronic currency networks around the world while offering the strength of Northern Trust as your principal counterparty.

## Transparent reporting for better insights

Detailed reporting down to the millisecond shows the power of aggregation. Trade with confidence and uncover insights through granular and transparent reporting dashboards.



Multiple algorithm options and customizations

A high-quality counterparty with a strong balance sheet and credit rating for currency transactions

Competitor agnostic liquidity panel comprised of specially curated banks and Electronic Communication Networks

Transactions executed discreetly with speed and granularity down to the millisecond

Agile technology capabilities

Transparency throughout the entire lifecycle of an order with straightforward pricing methodology

Detailed post-execution reporting











E-Commerce is part of Northern Trust Global Foreign Exchange, which provides a range of liquidity, trading, transparency and outsourced FX solutions to international asset managers and asset owners worldwide.

## Algorithms designed for your investment strategy

STRATEGY	DESCRIPTION	PARAMETERS
TWAP	The strategy divides an order into equal suborders and submits them to the market at equal intervals over a time period set by the client.	Start/end times
TWAP R	Automatically applies randomization to the execution amounts and times intervals of a normal TWAP with the aim of reducing market footprint.	Start/end times
Iceberg	Multiple sub-orders executing at a limit price. Will only execute when all of the sweep size can be executed at the limit price. A timeout for the liquidity provider dealt with. Aims to reduce shown interest and reduce footprint.	<ul><li>Limit price</li><li>Sweep size</li><li>Time limit</li><li>Lock-out time</li></ul>
DStop	A Dynamic Trailing Stop that trails at a set distance when the market moves in a favorable direction but moves in closer to the market when it goes in an unfavorable direction.	<ul><li>Stop primed price</li><li>Trailing stop offset</li><li>Expiry time</li></ul>
Peg	The Peg strategy submits suborders to the market on, or inside the bid or offer. Designed to capture the spread via resting orders.	<ul><li>Peg price delta</li><li>Sweep size</li><li>Time limit</li></ul>
Coil	Similar to an Iceberg, however the limit price moves in your favor at a delta of your choosing after each fill. Designed to capture beneficial market moves.	<ul><li>Limit price</li><li>Peg price delta</li><li>Sweep size</li><li>Time limit</li></ul>
ETWAP	A variation of a TWAP, with added automatic Dynamic Order Sizing based on market behavior and polarity. Inventory barrier to ensure order is filled completely.	<ul><li>Polarity (mean reverting or trending)</li><li>Damping factor</li><li>Maximum/minimum order size limit</li></ul>

#### To learn more, please contact:

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