

Frontier Execution Algos—Americas Quick Guide



STRATEGY	WHAT IT DOES	OPTIONAL PARAMETERS
LIQUIDITY CAPTURE STRATEGIES		
Fan Smart order router	Smart order router. Employs Virtu's low-latency market data and connectivity. Based on aggression level, interacts with displayed and non-displayed venues up to order limit. Will complete if marketable. <ul style="list-style-type: none"> • Aggressive+: Far immediate • Aggressive: Sweeps non-display and lit venues up to a price limit • Neutral: Midpoint sweep, then rests the residual balance at midpoint • Passive: Near-side peg in non-display and lit venues 	<ul style="list-style-type: none"> • Display qty. • Use the TIF field to differentiate between day and day_only orders
Covert Dark aggregator	Liquidity capture from non-displayed sources, including conditional orders. Will not post out loud on lit venues. May not complete. <ul style="list-style-type: none"> • Aggressive: Far-side peg in non-display venues • Neutral: Midpoint peg in non-display venues • Passive: Near-side peg in non-display venues 	<ul style="list-style-type: none"> • Min qty. • "I Would" price (lit)
Oasis Dark seek with take triggers	Seeks liquidity in non-display venues but will take in lit markets under certain conditions determined to be favorable, such as large quote sizes or trading activity. May not complete. <ul style="list-style-type: none"> • Aggressive: Far-side peg in non-display venues, most sensitive to take-based triggers • Neutral: Midpoint peg in non-display venues, less sensitive to take-based triggers • Passive: Midpoint peg in non-display venues, least sensitive to take-based triggers 	<ul style="list-style-type: none"> • Start/end time • Max POV • "I Would" price (lit)
EXECUTION PERFORMANCE STRATEGIES		
Catch Implementation Shortfall	Seeks to minimize slippage vs. arrival price. Balances the trade-off between impact and timing risk. May not complete. <ul style="list-style-type: none"> • Aggressive: 15-20% target participation rate • Neutral: 10% target participation rate • Passive: 5% target participation rate 	<ul style="list-style-type: none"> • Start/end time • Target POV • "I Would" price (conditionals) • Max POV • Must complete
Opportunistic Favorable price capture	Ultra-passive algo seeking to minimize slippage vs. arrival price. Seeks to execute at times determined to be opportunistic, such as taking under certain conditions, as well as providing liquidity at times when expected adverse selection is low. May not complete. <ul style="list-style-type: none"> • Aggressive: Engages the market under certain favorable book conditions • Neutral: Engages the market under more favorable book conditions • Passive: Engages the market only when book conditions deviate widely from normal 	<ul style="list-style-type: none"> • Start/end time • Max POV • "I Would" price (lit) • Must complete
SCHEDULE-BASED STRATEGIES		
VWAP	Targets the volume-weighted average price. Designed for use when executing order over specified time frame.	<ul style="list-style-type: none"> • Start/end time • Max POV
TWAP	Trade in equal share increments over the order duration. Designed for use when executing order over specified time frame.	<ul style="list-style-type: none"> • Incl. auctions
POV	Trade in-line with the market's volume at a specified rate. Designed for use when targeting desired participation rate.	<ul style="list-style-type: none"> • Auction only
Target Close	Executes along schedule to limit slippage from close. Designed for use when targeting close price.	<ul style="list-style-type: none"> • "I Would" price (lit) • On close %

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Frontier Execution Algos—APAC Quick Guide



STRATEGY	WHAT IT DOES	OPTIONAL PARAMETERS
LIQUIDITY CAPTURE STRATEGIES		
Fan Smart order router	Smart order router. Interacts with displayed and non-displayed venues, up to the order limit. Uses real-time queue length calculations on venue selection for current market conditions. Will complete if marketable. <ul style="list-style-type: none"> Aggressive: Price/Size Improvement—sweeps dark venues before displayed venues, posts balance at limit Passive: Pegs near touch 	<ul style="list-style-type: none"> • Display Qty
Covert Dark aggregator	Aggregates hidden liquidity from dark and conditional venues. May not complete. <ul style="list-style-type: none"> Aggressive: No minimum quantity (unless supplied). Neutral: May generate a minimum quantity if detects potential price impact Passive: Automatically generates a dynamically adjusting minimum quantity to balance the trade-off between price impact and liquidity 	<ul style="list-style-type: none"> • Min Qty • “I Would” Price (lit)
Oasis Dark with take triggers	Liquidity seeking emphasizing the dark but will interact with hidden and displayed liquidity on exchanges. Will participate in the close but may not complete. <ul style="list-style-type: none"> • Three levels of aggression (min POV): Aggressive (25%), Neutral (15%), Passive (5%) 	<ul style="list-style-type: none"> • Start/End Time • Max POV • “I Would” Price (lit)
EXECUTION PERFORMANCE STRATEGIES		
Catch Implementation shortfall	Work order along with the market, will participate in the auctions. Balances the trade-off between impact and timing risk. Exposes part or all of the order in dark venues to source block liquidity. May not complete. <ul style="list-style-type: none"> • Three levels of aggression (guideline POV excl. blocks): Aggressive (20%), Neutral (10%), Passive (5%) 	<ul style="list-style-type: none"> • Start/End Time • Max POV • Target POV • “I Would” Price (dark)
Opportunistic Favourable price capture	Has no sense of urgency. Attempts to trade at advantageous prices by avoiding adverse selection on passive placement as well as opportunistically removing on strong signals. May not complete. May participate in the close. Three levels of aggression available aligned with tolerance for adverse selection. <ul style="list-style-type: none"> • Guideline participation: Aggressive (4-10%), Neutral (3-7%), Passive (1-4%) 	<ul style="list-style-type: none"> • Start/End Time • Max POV • “I Would” Price (lit)
SCHEDULE-BASED STRATEGIES		
VWAP	Targets the Volume Weighted Average Price . Designed for use when executing order over specified time frame.	<ul style="list-style-type: none"> • Start/End Time • Max POV
TWAP	Targets the Time Weighted Average Price . Designed for use when executing order over specified time frame.	<ul style="list-style-type: none"> • Incl. Auctions
POV	Participates with market volume at or near target level. Designed for use when targeting desired participation rate.	<ul style="list-style-type: none"> • Auction Only • “I Would” Price (dark)
Target Close	Executes along schedule to limit slippage from close. Designed for use when targeting close price.	
Flex Flexible participation	Participates with market volume at a dynamically adjusting target rate. Designed for use when wanting to vary participation level based on price	<ul style="list-style-type: none"> • Min & Max Vol % • Trading Style • Benchmark Type/Price • “I Would” Ref/Price (lit or dark)

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Frontier Execution Algos—EMEA Quick Guide



STRATEGY	WHAT IT DOES	OPTIONAL PARAMETERS
LIQUIDITY CAPTURE STRATEGIES		
Fan Smart order router	Smart order router. Interacts with displayed and non-displayed venues, including SIs, up to the order limit. Uses real-time queue length calculations on venue selection for current market conditions. Will complete if marketable. <ul style="list-style-type: none"> Aggressive: Price/size improvement—sweeps dark/systematic internaliser venues before displayed venues, posts balance at limit Passive: Pegs near touch 	<ul style="list-style-type: none"> • Display Qty
Covert Dark aggregator	Aggregates midpoint liquidity from dark, frequent batch auctions, conditional venues, hidden midpoint pegged orders on exchange and ELP SIs. Utilizes real-time public dark trade prints and indicative frequent batch auction quotes in its allocation logic. Dark TAL venues can be accessed by sending a new order post-closing auction. May not complete. <ul style="list-style-type: none"> Aggressive: No minimum quantity (unless supplied) Neutral: May generate a minimum quantity if detects potential price impact Passive: Automatically generates a dynamically adjusting minimum quantity to balance the trade-off between price impact and liquidity 	<ul style="list-style-type: none"> • Min Qty • “I Would” Price (lit)
Oasis Dark with take triggers	Liquidity seeking emphasizing the dark but will interact with hidden and displayed liquidity on exchanges as well as react to ELP SI quotes when certain conditions present themselves. Will participate in the close and also dark TAL if balance remains at end of continuous but may not complete. Three levels of aggression (min POV): Aggressive (25%), Neutral (15%), Passive (5%)	<ul style="list-style-type: none"> • Start/End Time • Max POV • “I Would” Price (lit)
EXECUTION PERFORMANCE STRATEGIES		
Catch Implementation shortfall	Work order along with the market, will participate in the auctions. Balances the trade-off between impact and timing risk. Exposes part or all of the order in conditional venues to source block liquidity. May not complete. Three levels of aggression (guideline POV excl. blocks): Aggressive (20%), Neutral (10%), Passive (5%)	<ul style="list-style-type: none"> • Start/End Time • Max POV • Target POV • “I Would” Price (dark)
Opportunistic Favourable price capture	Has no sense of urgency. Attempts to trade at advantageous prices by avoiding adverse selection on passive placement as well as opportunistically removing on strong signals. May not complete. May participate in the close. Three levels of aggression available aligned with tolerance for adverse selection. Guideline participation: Aggressive (4-10%), Neutral (3-7%), Passive (1-4%)	<ul style="list-style-type: none"> • Start/End Time • Max POV • “I Would” Price (lit)
SCHEDULE-BASED STRATEGIES		
VWAP	Targets the Volume Weighted Average Price. Designed for use when executing order over specified time frame.	<ul style="list-style-type: none"> • Start/End Time
TWAP	Targets the Time Weighted Average Price. Designed for use when executing order over specified time frame.	<ul style="list-style-type: none"> • Max POV
POV	Participates with market volume at or near target level. Designed for use when targeting desired participation rate.	<ul style="list-style-type: none"> • Incl. Auctions • Auction Only
Target Close	Executes along schedule to limit slippage from close. Designed for use when targeting close price.	<ul style="list-style-type: none"> • “I Would” Price (dark)
Flex Flexible participation	Participates with market volume at a dynamically adjusting target rate. Designed for use when wanting to vary participation level based on price.	<ul style="list-style-type: none"> • Min & Max Vol % • Trading Style • Benchmark Type/Price • “I Would” Ref/Price (lit or dark)

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