BATS Smart Order Routing strategies provide Members a multitude of routing options with fast execution. All smart order routing strategies are available on the BATS BZX Exchange and BYX Exchange.

**Parallel Strategies – Route to Multiple Venues Simultaneously**

**Parallel D** targets the best price by splitting a routable order and sending it to multiple market centers simultaneously at the same price level. Liquidity is exhausted at each price level to the limit price.

**Parallel 2D** provides a faster execution than Parallel D. It splits a routable order and sends it to multiple market centers and multiple price levels simultaneously.

**Parallel T** accesses top of book liquidity only. Splits a routable order and sends it to multiple market centers executing against only the protected (top) quotes to the limit price.

All parallel smart order routing strategies may be combined with BATS’ DRT strategy to access pools of hidden liquidity in addition to protected market centers.

**DRT – Dark Routing Technique**

DRT is a dark routing technique that routes to dark pools offering potential price improvement and lower access fees.

The DRT functionality routes to participating Dark Liquidity Partners (DLPs) after accessing the BATS order book and before routing to protected markets using the BATS Parallel D strategy (described above). BATS will only maintain routing relationships with DLPs that provide quality executions in terms of meaningful fill rates and fast executions for BATS Members. As always, full anonymity is maintained for orders routed to DLPs.

DRT is available with any of BATS’ routing strategies except directed Intermarket Sweep Orders (ISOs) and Parallel T.

**TRIM & SLIM – Specialized Strategies to Minimize Price and Time**

All securities supported by BATS are available to be accessed with the TRIM and SLIM routing strategies. Tape B and Tape C securities will not be routed to the NYSE.

**TRIM – Route to Select Low-Cost Venues**

TRIM orders first access low-cost market centers, e.g., BYX Exchange, NASDAQ BX, EDGA etc. TRIM2 and TRIM3 are variations of TRIM that access even fewer low-cost market centers. These low-cost market centers are defined by BATS and are subject to change as markets make adjustments to their fee schedules. Next, TRIM orders access BATS’ DRT strategy, unless Members elect not to do so. The order accesses a second set of low-cost market centers, e.g., NYSE, before finally returning to the book of the originating exchange—BZX Exchange or BYX Exchange.

Non-IOC TRIM orders will post on the originating exchange. For orders that originate on BZX Exchange, TRIM may optionally access the BZX Exchange order book first.
SLIM – Route to All Markets While Minimizing Fees
SLIM is similar to TRIM in that it seeks to minimize the cost of routing to away markets after accessing certain specified market centers, yet SLIM will route to all protected market centers.

Orders originating on BZX Exchange first scrape that order book before routing to BYX Exchange. Orders originating on BYX Exchange only scrape the BYX Exchange book in the order’s first step. The second step is to access low-cost market centers. Step three is to access DRT markets, unless Members elect not to do so. SLIM next routes to additional low-cost protected market centers before accessing all remaining protected market centers. Finally, the order returns to the originating exchange (BZX Exchange or BYX Exchange). Non-IOC SLIM orders post on the originating exchange.

SLIM Routing Strategy

SLIM+ – BZX Exchange-only Strategy
SLIM+ is identical to SLIM, except it first routes to BYX Exchange prior to accessing the BZX Exchange order book.

B2B - BATS to BATS
B2B gives Members the ability to route to both of the BATS Exchanges’ order books at-cost of the target platform. Orders will first check the originating order book (BZX Exchange or BYX Exchange). Optionally, DRT markets may be accessed next. Then any unexecuted portion of the order will route to the BATS sister exchange at-cost.

CYCLE –Sequential Routing Strategy
CYCLE ensures orders are filled to the greatest extent possible, and at the best prices at all protected markets. This strategy targets one protected market at a time and then sends the full remaining quantity on to the next market center. If the order can’t be filled completely at the National Best Bid and Offer (NBBO), the CYCLE strategy will, in an iterative manner, route to other markets at the limit price of the original order.

The router first prioritizes the market centers by the price of the quote. For market centers at the same price level, the router uses several factors, including liquidity and speed of execution, to determine priority. It should also be noted the BATS smart order router accesses BATS’ liquidity at each price level before routing to other market centers.

After tuning the performance of the BATS router, the BATS CYCLE routing strategy has realized an improved fill rate and faster execution for Members compared to the competition.

Re-Rout – Aggressive Routing Strategy
Re-Route is designed to aggressively re-route and fill orders, where CYCLE or Parallel strategies could leave unfilled shares resting on the BATS book until they are matched with an incoming order to BATS.

By choosing Re-Route, orders come off the BATS order book and target a locking or crossing quote at another market center, matching or improving upon the limit price. This behavior occurs anytime BATS receives an updated quote from another market that locks OR crosses the order resting on the BATS book. Re-Routing may continue until the order is completely filled.

Links
- Technical Specifications
- FIX (Financial Information Exchange) and BOE (Binary Order Entry) protocol information for the BATS Exchanges.
- Order Types
- Order types and routing strategies for the BZX Exchange and BYX Exchange platforms.
- DRT
- Dark Routing Technique offering possible price improvement and lower access fees.
- Fee Schedule
- Pricing for accessing liquidity, liquidity rebates, routing and other pricing models.

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