

Turns your own Test Matching Engine into a Responsive Realistic Test Environment for Members

To date, testing of trading algorithms and execution systems on an execution venue's own test matching engine, an essential step before live trading, has been mostly limited to conformance testing. Members have either booked time on a dedicated matching engine or have been given access to a shared one. In either case the orders usually have to be filled manually by sending a matching order. It has not been possible to perform the sort of dynamic testing which would expose algorithm or execution system limitations in the face of realistic market conditions, market replay is of no help because market disorder requires realistic interaction with the orderbook. In consequence, execution venue testing has not been able to mitigate certain crucial operational risks including the propensity to cause or contribute to market disorder.

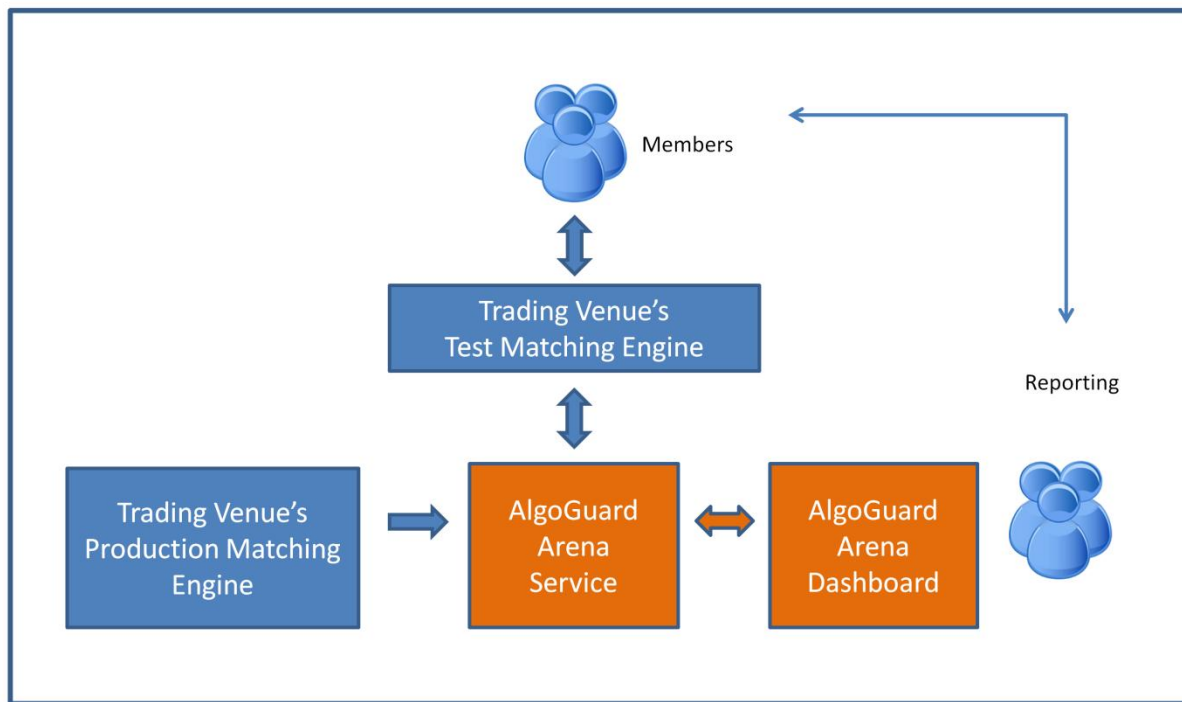
AlgoGuard Arena is the first system to turn an execution venue's own test matching engine into a statistically representative responsive market which reacts realistically and dynamically to multiple members' orders. Recently added features include customisable test scheduling with multiple stress tests and antagonist algorithms designed to probe for propensity in member algorithms to contribute to market disorder. Pass/fail reporting is provided with drill-down analytics for essential Algorithm Stability Testing.

Key Features

- **Seamless & Transparent:** Plugs directly into the execution venue's own test matching engine using the standard interfaces already provided to members. Members access to the test matching engine is unchanged.
- **Representative & Isolated:** Statistically samples historical orderbook data and maintains a representative market in the test matching engine whilst being completely isolated from any risk of live trading.
- **Responsive & Dynamic:** The emulated market closely resembles the real market in all important respects including spreads, volatility, volume, fill to cancel ratio. In consequence it responds realistically and dynamically to test orders in the execution venue's own test matching engine placed and executed by members.
- **Anonymous:** Members cannot know whether they are interacting in the test matching engine with other member's orders or with orders placed by AlgoGuard Arena itself, so anonymity is better than in live trading.
- **Stress Tests:** Customisable test schedules under the control of the trading venue can stress test the market in a variety of ways so that the potentially disruptive behaviour of connected member algorithms and execution systems can be assessed.
- **Compliance & Logging:** Helps members to meet the increasingly stringent testing requirements for algorithms and execution systems being imposed in many jurisdictions. Stores test results for as long as required by regulation.
- **Pass/Fail Reporting & Traceability:** Dashboard provides control and reporting to trading venue staff. Provides Pass/fail reporting for member algorithm's provocation of market disorder with drill-down analytics.
- **Multi-market:** option to include customisable test matching engine to emulate other venues published rules for stability testing of multi-market member algorithms.

TraderServe's AlgoGuard Arena is fully multi-asset class and is already proven in production at a major exchange. AlgoGuard Arena is based on the core TraderServe platform used for high volume and low latency trading on exchanges worldwide.

Contact marketing@traderserve.com for more information

Typical Trading Venue Deployment

powered by



-  Test Trades & Data
-  Live Market Data
-  Reports & Control