Inside Market Data

ATD Revamps Data for Options Drive

South Carolina-based algorithmic equities market maker Automated Trading Desk is phasing in a replacement market data infrastructure to support a push into the options trading market in the next few months, officials say.

ATD previously used home-grown, server-based messaging middleware, along with in-house feed handlers to collect direct feeds from the US equity markets and distribute data to the firm's predominantly computer-based trading operations.

However, with options quote and trade data rising exponentially and the Options Price Reporting Authority's consolidated feed of the US options markets driving massive growth rates, the pressure on ATD's internal solution would have proved too great to withstand the rising data tide without significant re-engineering, officials say.

"When we looked at the options market, we found that the data rates are very high… And the infrastructure we had in-house could have handled it, but would have required a lot of additional hardware and would have put a strain on networking infrastructure," says Carlos O'Ryan, chief technology officer at ATD.

"We thought about developing [a new infrastructure] ourselves, but decided our people have more important things to do than develop messaging middleware," O'Ryan says.

Instead, the firm recently signed up Santa Clara, Calif.-based middleware vendor Real-Time Innovations to provide the infrastructure, and will go live on RTI's middleware sometime in Q2 of this year. ATD will first roll out the middleware for options trading, beginning with a limited number of symbols on one market only—NYSE-Arca—though the firm hopes eventually to extend it to carry data from all US options exchanges.

ATD began evaluating the vendor last October, along with several other middleware providers, before signing a multi-year deal earlier this month, says Bruce Ericson, vice president of sales at RTI.

"ATD makes its money on trades where it holds stocks for less than three seconds… and because this window is so narrow, they place high demands on the latency and throughput of their messaging middleware," Ericson says. "And with the move to options… lots of external drivers—such as algorithmic trading and increased data rates—will push firms to look at upgrading that part of their infrastructure."

Once the initial deployment proves successful, the firm will gradually expand its trading coverage before transitioning its equities trading to the new middleware over the course of the year, which will include datafeeds from Nasdaq and the New York and American stock exchanges as well as US ECNs. The firm will probably migrate its equities market feeds one at a time to further minimize risk, O'Ryan says.

ATD will have to adapt its home-grown feed handlers to the new environment, and will also need to develop new options market handlers, as well as adapt its trading models to deal with new instrument types. "We have to implement standard pricing models for options," O'Ryan says. "We understand the equity markets well… and think we can use our predictive models to improve options trading… and also hedging on the equities side."

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