![rti logo] **rti**

Automated Trading Desk (ATD)
Low-Latency Options Data Distribution

Customer overview

ATD is a technology company specializing in the creation of systems for automated trading and customized equity execution solutions through its broker-dealer subsidiaries. ATD offers automated execution solutions in all domestic equity markets, including the listed, over-the-counter, exchange traded fund and bulletin board marketplaces.

ATD's automated systems strive to deliver superior execution, realizing significant time and cost savings. ATD's systems execute orders from buy-side institutions, retail order-sending firms, and sell-side broker/dealers, handling orders ranging in size from odd lots to institutional size blocks. In the fourth quarter of 2006, ATD accounted for approximately 7% of all NYSE volume and 6% of all NASDAQ volume.

Application

ATD required a high-performance messaging solution to distribute real-time market data from direct exchange and Electronic Communication Network (ECN) feeds to its price prediction engines, automated trading applications and order management system.

Challenges

ATD was seeking to update its market data infrastructure in order to more cost-effectively cope with data volumes that were growing 50% annually. This challenge was made more acute by ATD's expansion from equities to options trading, which increases by a factor of 10 the amount of data that must be distributed. Supporting these exploding data volumes with ATD's existing messaging technology would have required a substantial investment in additional hardware.

In addition to high throughput, ATD needed low latency for its high-speed automated trading.

"ATD conducted extensive in-house testing of the leading messaging products targeted at market data distribution. We found that RTI provided the most consistent performance, with no latency spikes even under times of peak volume. RTI also had the most full-featured product, with more comprehensive control over performance tuning and built-in support for marshalling data into an efficient binary format that reduces network overhead. In addition, we liked the fact that RTI was able to deliver the throughput and latency we needed with standards-compliant interfaces. RTI has provided ATD with phenomenal support, both during our original testing and subsequently."

Dr. Carlos O'Ryan
Chief Technology Officer, ADT

Why RTI was selected

- RTI provided the highly scalable throughput that ATD needed to support rapidly growing data volumes on its existing hardware

- RTI's messaging technology exhibited the most consistent low latency, with significantly lower jitter under heavy loads then the other products ATD benchmarked

- RTI had the most full-featured product, including more comprehensive tuning capabilities and support for binary data marshalling

- RTI offered interfaces that comply with an industry standard, the Data Distribution Service for Real-Time Systems (DDS)

About RTI

Real-Time Innovations (RTI) is the Industrial Internet of Things (IIoT) connectivity company. The RTI Connext® databus is a software framework that shares information in real time, making applications work together as one, integrated system. It connects across field, fog and cloud. Its reliability, security, performance and scalability are proven in the most demanding industrial systems. Deployed systems include medical devices and imaging; wind, hydro and solar power; autonomous planes, trains and cars; traffic control; Oil and Gas; robotics, ships and defense.

RTI is the largest vendor of products based on the Object Management Group (OMG) Data Distribution Service™ (DDS) standard. RTI is privately held and headquartered in Sunnyvale, California.

Your systems. Working as one.

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