

# Securities Industry News

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What Makes Markets

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## Nasdaq Makes Tick-Data Play

By JOHN HINTZE

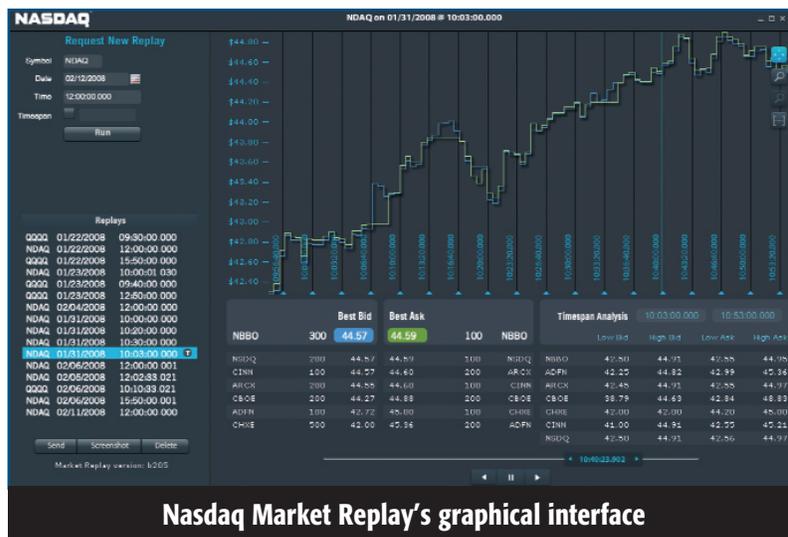
Literally bringing the electronic stock market to desktop computers, Nasdaq Stock Market has introduced a tool that gives traders and compliance officers nearly immediate access to detailed quote activity, allowing them to develop trading strategies or resolve potentially thorny best-execution issues.

Though the new product, Market Replay, is now available to professional traders, it will eventually be extended to retail investors over Web portals such as Yahoo and AOL, said Adena Friedman, EVP and head of Nasdaq's data products division.

Nasdaq developed the tool with Adobe Systems of San Jose, Calif. and utilizes its Adobe AIR technology—launched on Feb. 25, the same day as Market Replay—which delivers rich Internet applications to browsers and desktops. The Nasdaq application, which has a user-friendly graphical interface, allowed Adobe to showcase the power of its new technology, said Friedman. “What better way to show its capabilities than through Nasdaq, which has more data to crunch than any other exchange?”

Friedman said that Seattle-based Amazon.com will store Market Replay-related data at its numerous facilities across the country, providing proximity to serve the data quickly to customers.

Users enter the stock symbol, date and time of the trade and press “replay” to download data packets containing the national best bids and offers (NBBOs) across all the exchanges during the five minutes before and after the trade. The



Nasdaq Market Replay's graphical interface

bids and offers are displayed in line graphs—one for bids, one for offers—while a text panel below shows the NBBO at specific exchanges. A zoom function allows users to highlight time periods on the bid and offer lines and view price ranges touched by the NBBO within tighter and tighter timeframes.

### Sifting Through Prices

Claude Courbois, AVP of product development at Nasdaq OMX Group, said that current trading platforms and applications such as Nasdaq's Reg Recon alert users when executions fall outside the NBBO and fail to meet the best-price demands of Regulation National Market System, which went into effect last year. Compliance officers have to sift through rows of data to verify whether each trade was at the NBBO.

Market Replay's graphical interface displays that information almost immediately. “Given where the market was trading around your time-stamp, was your price plausible?” said Courbois.

And soon retail investors will have the

ability—Nasdaq is in talks with the major Web portals about providing the service, possibly for free—to check whether unexpected prices they received on trades were appropriate. For example, “if you sold at \$15 and the national best bid never went below \$15.20, then it's implausible that you were paid only \$15,” noted Courbois. “You may want to talk to your broker.”

Market Replay permits users to narrow the time period around the trade to 1 millisecond and view a list of detailed quote activity at the relevant exchanges. “This is the part that really impresses brokers,” he added. “They can see every possible price that occurred, even if it lasted for only a fraction of that millisecond.”

The Nasdaq release follows NYSE Euronext's Jan. 14 announcement that it had agreed to purchase Wombat Financial Software, which offers solutions that capture historical market data, or tick data. According to Jamie Selway, managing director of New York-based White Cap Trading, the now-public exchanges are interested in getting into more value-added, revenue-generating services. “Nasdaq has the data and tech know-how and the footprint in terms of a client base that wants this stuff,” said Selway.

John Jacobs, director of operations at Lime Brokerage, a broker-dealer supporting high-volume, high-frequency traders, sees Market Replay as an efficient tool for “keyboard and screen-based” traders to analyze their strategies.

## TECHNOLOGY

Market data providers such as Bloomberg also offer historical quote information, he noted, but not at the same level of granularity or in as intuitive a format.

The interface should enable traders to more clearly visualize market activity. Jacobs said he's currently talking to Nasdaq about installing the service on Lime's trading desk, especially for the head trader.

### Defending Your Execution

New York-based Lime's core customers are high-speed traders who will jump on favorable prices that may fall somewhat outside current market prices, said Jacobs. Investors on the other side of a trade will call up Nasdaq to ask whether it was erroneously outside the NBBO. Those disputes must be addressed an average of five times a day, he said, and "sometimes we're swamped."

In such instances, Lime must show the trade was executed correctly and generally in line with the NBBO. "If you're not an aggressive advocate for your customer, the exchange may see it your way or it may not," Jacobs said. Being able to drill down to the millisecond is crucial. "We can show the trade was done at the NBBO, what the market trends were at that time, and that it was a reasonable trade," he said.

The exchanges typically cancel orders that would be crossed or locked on other market centers. Lime's newer clients may not understand why their trades didn't go

through, and Market Replay could help the broker explain those dynamics. "We can take a customer's order entered at a specific time, and go into this tool and see what the customer saw at the time of the trade," Jacobs said, adding that such data—freely provided by the exchanges—is in Lime's database but not as readily

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**The Market Replay graphical interface should enable traders to more clearly visualize market activity.**

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available. "One of the greatest benefits is being able to zoom in and explain what customers see as errant behavior."

While retail customers might receive the service for free, with the portals paying a fee to Nasdaq and presumably recouping that—and more—through advertising, professionals are charged a monthly \$50 user fee. The retail version will provide data for several days or a few weeks; the professional product is back-

filled with a year's worth of data, available for nearly instant retrieval.

Professional users can also ask for older data—a pop-up box from Nasdaq will tell them when the request will be met, usually within a few hours or the next day. Currently, firms must pay tick-data providers for that information and build or buy software to analyze it, a process that can take several weeks and carry significant costs, Nasdaq's Courbois said.

Paying clients that want historical data to respond to regulatory inquiries, or perform regression analysis to build strategies, are sent data packets in text format that are downloadable into spreadsheets; Nasdaq can help firms develop code to access the files more directly. Courbois said the product originally had an export box to simplify the process, but that was removed because the exchange didn't know whether users wanted data snapshots or data series. "Since there are additional costs to building both, we dropped that for now," he said, noting that Nasdaq will wait for more market input before proceeding.

Nasdaq also plans to enhance Market Replay to provide quick and easy access to other data points, including showing every trade around the user's specific trade, activity leading up to its opening and closing crosses, and post-IPO activity—"so management could replay how trading transpired" after the initial public offering, Courbois said. ■



For more information about NASDAQ Market Replay, contact one of the following members of the NASDAQ OMX Market Data Sales Team:

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