

MEMORANDUM

July 27, 2010

To: File No. S7-11-10

From: Leigh Duffy
Division of Trading and Markets

Re: Staff Meeting with Noetic Partners, XtremeData, Greener & Hook, and
Gorman & Associates

On July 27, 2010, representatives from Noetic Partners (Justin S. Magruder, CEO and President), XtremeData (Geno Valente, Vice President), Greener & Hook (Bill Greener) and Gorman & Associates (Patrick Gorman) met with staff from the Division of Trading and Markets (Michael Gaw, Assistant Director; Jennifer Colihan, Special Counsel; Rebekah Liu, Special Counsel; and Leigh Duffy, Attorney) and staff from the Office of Compliance Inspections and Examinations (Mark Donohue, Assistant Director and John Polise, Assistant Director). The participants discussed the Commission's proposed rule-making concerning a consolidated audit trail. Mr. Magruder provided the attached presentation, titled "TickLab – Consolidated, Real-Time & Historical Global Market Data for Quantitative Research and Analytics."

TickLab...

Consolidated, Real-Time & Historical
Global Market Data
for Quantitative Research and Analytics

July 27, 2010

Participants

Securities & Exchange Commission

- John Polise, Assistant Director Office Compliance Inspections and Examinations
- Mark Donohue, Assistant Director Office Compliance Inspections and Examinations
- Michael Gaw, Assistant Director Office Trading and Markets
- Jennifer Colihan, Trading and Markets
- Rebecca Liu, Trading and Markets

TickLab Team

- Justin Magruder, President, Noetic Partners
- Geno Valente, Vice President, XtremeData
- Bill Greener, Greener & Hook
- Patrick Gorman, Gorman & Associates

Agenda

- The Problem
- Solution Criteria
- Government Seeks to Address the Problem
- Regulatory Initiatives
- Legislative Initiatives
- The Solution Does Exist
- What is TickLab?
- The TickLab Team
- Next Steps
- Contact

The Problem

- Trading volumes in markets around the world are surging, and the volume of real-time market data is exploding.
 - Daily market data volume in US markets alone is in the hundreds of millions of trades and tens of billions of quotes, and is growing at a rate of approximately 100% annually.
 - In May 2010, peak market data volume across all trading places in North America exceeded 2.8 million messages per second, and total daily volume currently exceeds 3 terabytes of raw data per day.
- Due to its massive quantity and complexity, market participants, including regulators, market makers, investors and academics, tend to capture only slices and samples of this data.
 - Most organizations collect only enough current data to analyze “top of the book” order information, and generally keep a subset of data fields in “flat files” at the end of day for users to load into complex, proprietary databases.
 - No organization is equipped to provide access to complete, consolidated global market data history.

The Problem

- The combination of massive volume and the lack of complete and timely records is a growing problem for market participants who have long sought a consolidated current and historical record of market activity.
- This results in a lack of transparency that makes it difficult if not impossible for these market participants to achieve their objectives.
- Regulators and compliance officials are challenged to ensure best execution, measure broker performance, and detect market manipulation and outright fraud because there is no consolidated transaction database showing the complete history of trades and quotes.

Solution Criteria

- Any solution must provide market participants with:
 - complete and accurate data from all exchanges,
 - current and historical data about trades,
 - every quote, or the “full depth,” in the order book.
- Allowing users, at a glance, to know what was real and true at any given moment in time, up to the minute, on a continuous basis.

Government Seeks to Address the Problem

IMF: Systemic Risk Regulators Need More Tools to be Effective

By Heather Scott

13 April 2010

(c) 2010 Market News International, Inc.

SEC PROPOSES CONSOLIDATED AUDIT TRAIL SYSTEM TO BETTER TRACK MARKET TRADES

27 May 2010

Copyright 2010. HT Media Limited. All rights reserved.

WASHINGTON, May 26 -- The Securities & Exchange Commission issued the following press release:

The Securities and Exchange Commission today proposed a new rule that would require the self-regulatory organizations (SROs) to establish a consolidated audit trail system that would enable regulators to information related to trading orders received and executed across securities markets.

A consolidated audit trail system would help regulators keep pace with technology and trading patterns in the markets. Currently, there is no database of comprehensive and readily accessible data regarding orders and executions. Stock market regulators tracking suspicious market activity reconstructing an unusual event must obtain and merge an immense volume of disparate data from a number of different markets and market participants. Regulators are seeking more efficient access to data through a far more and effective cross-market order and execution tracking system.

As the events of May 6 made clear, today's securities markets are highly automated, and trading activity is widely dispersed across many trading venues. Due to rapid technological advances, trades are now transacted in a matter of milliseconds. Such dispersed, automated trading activity makes it more challenging for SROs and the SEC to conduct cross-market supervision of trading activities and oversight of the securities markets and market participants.

Currently, there is no single database of comprehensive and readily accessible data regarding orders and executions. Instead, each SRO uses its own separate audit trail systems to track information relating to orders in its respective markets. And, the existing audit trail requirements vary significantly across markets. That means that regulators, when conducting a cross-market analysis, must obtain and merge together a large volume of disparate data from different entities.

Reed Introduces Bill Creating A Data-Monitoring Institute

9 February 2010

Journal Group, Inc. All Rights Reserved

Sen. Reed introduced a measure Monday that would create a National Data Monitoring Institute to give regulators better data to monitor systemic risk throughout the financial system.

The bill would direct and standardize data, conduct long-term research and develop strategies to address threats to the financial system in an effort to prevent another crisis like the one that led to the collapse of Lehman Brothers. Sen. Reed, chairman of the Senate Banking, Housing and Urban Affairs Committee, said the bill would create a National Data Monitoring Institute to give regulators better data to monitor systemic risk throughout the financial system.

SEC Approves Proposal For Trade Data Repository

26 May 2010

(c) 2010 Dow Jones & Company, Inc.

By Fawn Johnson Of DOW JONES NEWSWIRES

WASHINGTON (Dow Jones)--The U.S. Securities and Exchange Commission voted 5-0 Wednesday to approve a proposal to require national securities exchanges to give regulators data so that they can aggregate real-time market information across multiple platforms.

The May 6 stock market "flash crash" has put pressure on the SEC to speed up its creation of a single market trail. Right now, individual exchanges keep track of trading in their own markets, but regulators don't have easy access to cross-market data.

The SEC says the new data system would allow regulators to quickly reconstruct market situations like the May 6 market tumble, when the Dow Jones Industrial Average fell nearly 1,000 points before staging a partial recovery.

It comes with a price, however. SEC staffers estimate the initial cost of building the repository at \$4 billion, to be born by the trading venues and broker-dealers. They would incur an additional \$2.1 billion annually to maintain the system and conduct market surveillance, according to SEC estimates.

Regulatory Initiatives

Proposed SEC Rule 613

The Securities and Exchange Commission (“Commission”) is proposing new Rule 613 under Section 11A(a)(3)(B) of the Securities Exchange Act of 1934 (“Exchange Act”) that would require national securities exchanges and national securities associations (“self-regulatory organizations” or “SROs”) to act jointly in developing a national market system (“NMS”) plan to develop, implement, and maintain a consolidated order tracking system, or consolidated audit trail, with respect to the trading of NMS securities.

The Commission preliminarily believes that with today’s electronic, interconnected markets, there is a heightened need for regulators to have efficient access to a more robust and effective cross-market order and execution tracking system.

A consolidated audit trail would significantly aid in SRO efforts to detect and deter fraudulent and manipulative acts and practices in the marketplace, and generally to regulate their markets and members.

The Commission also preliminarily believes that requiring the central repository to collect and retain in its database the transaction information in a format compatible with the order execution information would aid in monitoring for certain market manipulations.

The Commission requests comment on the usefulness or necessity of requiring the central repository to collect and retain in a format compatible with the order audit trail information the NBBO and transaction report information to help achieve the stated objectives of the consolidated audit trail.

- Proposed SEC Rule 613 (Consolidated Order & Trade Reporting) under Section 11A(a)(3)(B) of the Securities Exchange Act of 1934

Legislative Initiatives

The National Institute of Finance Act

The recent catastrophic events in financial markets revealed significant gaps in the information and analytic tools available to regulators and policymakers charged with ensuring the health of the financial system.

Notwithstanding noteworthy efforts from the research community, sustained, large-scale programs of applied research and development necessary to create operational systems for understanding, measuring, and monitoring systemic risk in financial systems have not emerged.

No organization anywhere has access to the comprehensive transaction-level data that are necessary to map the network of counterparty relationships in the financial system. Absent such data, it is not possible to evaluate the primary counterparty risks, the extent to which any given firm is vulnerable to the failure of one of its counterparties, or broader counterparty network risks.

The creation of a system for collecting and organizing a comprehensive financial transaction database that employs standardized formats is feasible.

- The National Institute Of Finance Act Of 2010, Introduced by Senator Reed in 2/2010 and incorporated into the Restoring American Financial Stability Act of 2010 from the Senate Committee on Banking, Housing, and Urban Affairs by Senator Dodd in 5/2010

The Solution Does Exist

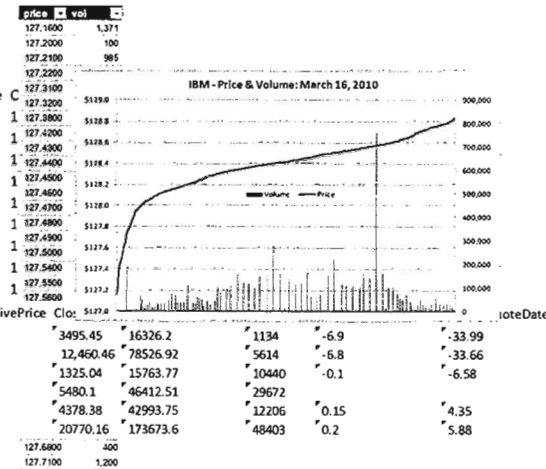
- SEC staffers estimated the cost of building the database at \$4 billion and annual maintenance at \$2.1 billion.
- The good news is that the solution is now available and will be fully operational with domestic markets by September 1, 2010, and will include complete international coverage by December 31, 2010, at a cost significantly below initial SEC estimates.
- The TickLab team has developed the most advanced, scalable, high-performance supercomputing system for market data and tick data analysis in the world.

The Solution Does Exist

- TickLab has the capacity to provide you with the information you are seeking — complete, timely and accurate information about every quote and every transaction in every market.
- Regulators and market participants no longer need to interpolate and estimate. TickLab provides real-time market data that is fully integrated with a complete, unaltered historical record.
- We can demonstrate the product at your convenience and make it available to you in a matter of weeks, not years.

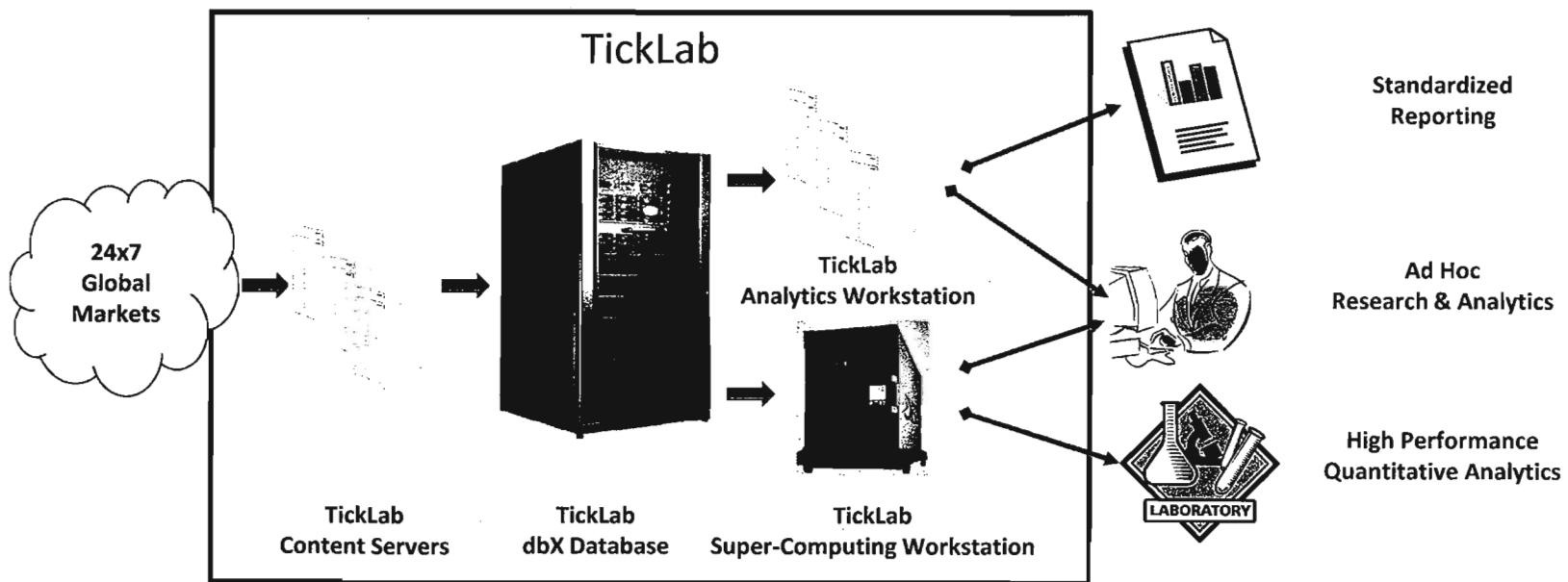
Bid	BidSize	BidCondition	BidTime	BidExchange	Ask	AskSize	AskCondition	AskTime	AskExchange
0:69.87	1:1	2:0x52	3:09:52:38.072	4:PA	5:69.88	6:1	7:0x52	8:09:52:38.072	9:N
0:26.74	1:1	2:0x52	3:09:52:38.072		5:---	6:---	7:0x52	8:09:52:38.072	
0:25.93	1:3	2:0x52	3:09:52:38.073		5:---	6:---	7:0x52	8:09:52:38.073	
0:13.21	1:1	2:0x52	3:09:52:38.068		5:13.22	6:1	7:0x52	8:09:52:38.068	
0:35.82	1:3	2:0x52	3:09:52:38.068		5:35.83	6:5	7:0x52	8:09:52:38.068	
0:6.4	1:5	2:0x52	3:09:52:38.070		5:6.41	6:32	7:0x52	8:09:52:38.070	
0:69.87	1:1	2:0x52	3:09:52:38.072		5:69.88	6:1	7:0x52	8:09:52:38.072	
0:7.92	1:1	2:0x52	3:09:52:38.065		5:9.3	6:1	7:0x52	8:09:52:38.065	
0:9.17	1:1	2:0x52	3:09:52:38.068		5:9.77	6:10	7:0x52	8:09:52:38.068	

Bid	BidSize	BidCondition	BidTime	BidExchange	TradeExchange	TradeHigh	TradeHighCondition	TradeHighTime	TradeHighExchange	TradeLow	CumulativePrice	Close	Volume	Change	Open	
00:14:30.560	U	Opra1	1	AJL/N/X.PO	13.4	5	0x49	14:34:14.000	2010-01-26		239	3495.45	16326.2	1134	-6.9	-33.99
00:14:30.560	U	Opra1	1	AJL/N/X.O	13.4	5	0x49	14:34:14.000	2010-01-26	PO	879	12,460.46	78526.92	5614	-6.8	-33.66
00:14:30.743	U	Opra1	1	AJL/B/Y.W	1.42	1	0x20	14:34:14.000	2010-01-26		834	1325.04	15763.77	10440	-0.1	-6.58
00:14:30.743	U	Opra1	1	AJL/B/Y.O	1.42	1	0x20	14:34:14.000	2010-01-26	W	3390	5480.1	46412.51	29672		
00:14:31.142	U	Opra1	1	AJL/B/X.W	3.6	50	0x20	14:34:14.000	2010-01-26		1212	4378.38	42993.75	12206	0.15	4.35
00:14:31.142	U	Opra1	1	AJL/B/X.O	3.6	50	0x20	14:34:14.000	2010-01-26	W	5602	20770.16	173673.6	48403	0.2	5.88



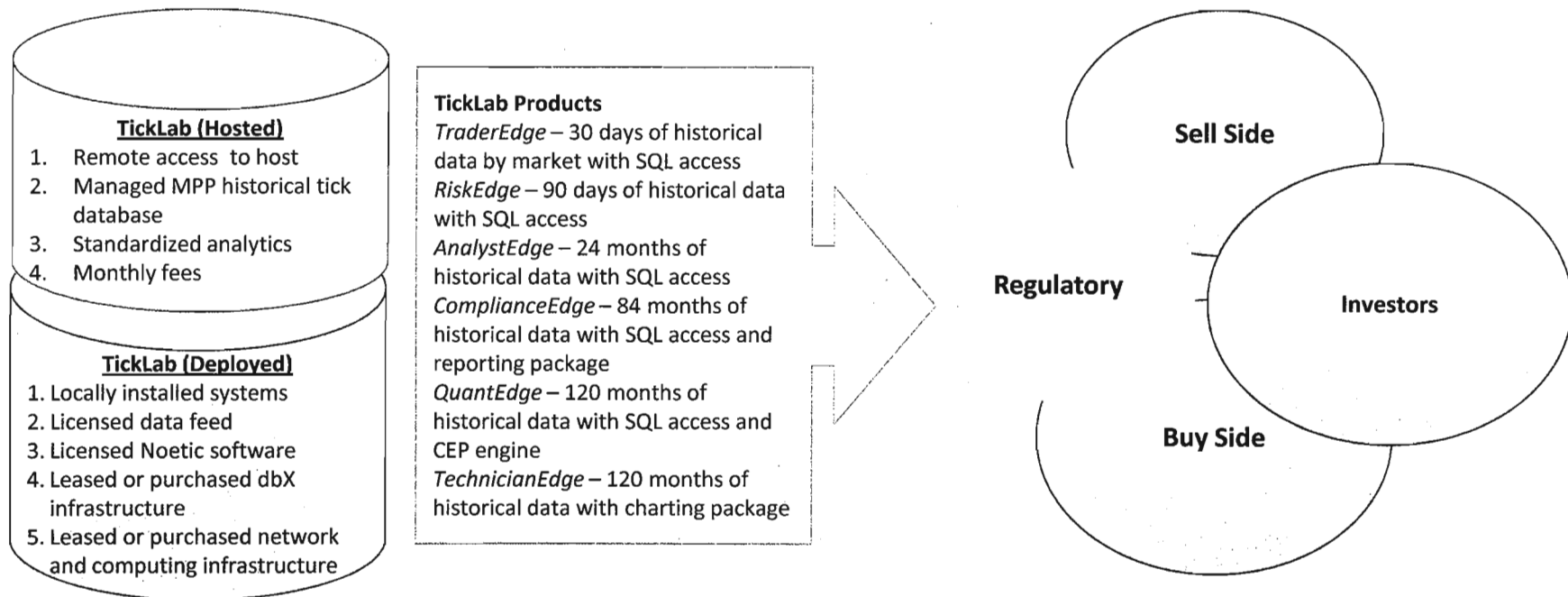
What is TickLab?

- TickLab is a powerful market data management system designed to collect all real-time data streams from all live markets and make it available for analytics immediately, with integrated historical content.
- TickLab collects real-time, comprehensive global content and loads it into the high-performance, massively-scalable super-computing platform.



What is TickLab?

- TickLab runs continuous comprehensive, high performance tick data management processes that are tailored to address the requirements of regulators and other market participants.
- Daily reconciliation processes ensure that complete, valid and unaltered data is presented and available to users on demand.



The TickLab Team



Market Data Delivery

ACTIV Financial Systems is a leading provider of market data content and technologies to market makers, hedge funds, brokers and trading systems. The company provides managed low-latency and high-volume market data services to more than 350 customers worldwide. As vendor of record, ACTIV also delivers consolidated, hosted and on-site ticker plant services for exchanges around the globe.



Database Design

Noetic Partners Inc. designs and develops high performance database and analytics systems for financial markets participants. Noetic leverages its deep knowledge of market and reference data using the most advanced massively parallel processing technologies available. Noetic helps its customers unlock the value of their information and solve their toughest data management problems.



Database Platform

XtremeData offers innovative solutions to large data and complex computing problems. The dbX family of database analysis appliances offers ease-of-use, unmatched performance and scalability from Terabytes to Petabytes. dbX lets customers extract actionable knowledge from their data and compete cost-effectively with analytics.



Computing Systems

A global leader in supercomputing, Cray Inc. provides innovative computing platforms that enable scientists and engineers in academia, government, and industry to meet both existing and future computational challenges on a wide variety of applications.

Next Steps

- We can demonstrate TickLab, its features and benefits, to the Commission at your convenience.
- We can deploy TickLab for the Commission in Q3 or Q4 2010.
- What questions can we answer, what presentations need to be made, and what additional information would be needed to secure SEC approval to implement our solution at a fraction of the cost now contemplated?

Contact

For questions and to arrange a demonstration, please contact:

Justin Magruder
President & CEO
Noetic Partners

E: justin@noetic-partners.com

C: 212-879-1161

M: PO Box 1151
Washington, D.C. 10013

M: 110 East 57th Street
Suite 4A
New York, NY 10022