

Proof of Concept Successful in Optimizing FIX Market Data Messages Using the FAST Protocol SM

December 19, 2005 – FPL is pleased to formally announce test results from the Market Data Optimization Working Group Proof of Concept (POC), a focused effort designed to develop practical solutions for the efficient dissemination of market data. The POC represents a series of well-controlled tests executed using a new data compaction methodology developed by FPL's Market Data Optimization Working Group called FIX Adapted for STreaming SM also known as the FAST Protocol SM. The focus of this current phase is to demonstrate the effectiveness of the FAST Protocol on FIX market data message formats.

The FAST Protocol SM leverages implicit tagging, field encoding and serialization in order to radically reduce message size and bandwidth utilization. The POC has demonstrated the ability to significantly improve communication efficiencies for several real-world exchange data feeds without incurring material trade-offs in processing and latency. The FAST Protocol SM is based on the concept of data familiarity which allows greater speed and efficiency than conventional compression utilities such as ZLIB and GZIP.

The results thus far indicate that the encoding algorithm is fast enough to keep up with data rates well over 10 Mbit/second and in some cases over 75 Mbit/second before any processing latency is introduced. Testing activities demonstrated 81% to 94% peak compression rates with maximum processing speeds reaching 667,000 messages per second.

The sample data sets included in the initial phase of the POC are Archipelago Exchange's ArcaBook Feed, Options Price Reporting Authority (OPRA) Feed, Chicago Mercantile Exchange (CME) Globex Feed, and London Stock Exchange (LSE) Feed.

This phase will result in the final publication of a reference implementation of the FAST Protocol SM, a user reference guide, and supporting white papers covering best practices.

Get Involved with FAST - With the increased use of direct feeds coupled with sheer growth in electronic trading volumes and the resultant market data message rates, several market centers have expressed interest and participated in the FPL Market Data Optimization working group activities. The FAST Protocol SM provides a significant opportunity for the financial community as a whole to improve the effectiveness of the technology infrastructure. Through efforts such as this, FPL continues to provide innovation and leadership to the financial technology community.

Additional opportunities to learn about FAST Protocol SM will be announced as they are scheduled.

FPL would like to recognize the sponsors of POC including ArcaEx, Chicago Mercantile Exchange (CME), International Stock Exchange (ISE), London Stock Exchange (LSE), Singapore Exchange (SGX) and Microsoft. In addition, FPL would like to recognize the contributions and support of Pantor Engineering and SpryWare. Both Pantor and SpryWare were retained by FPL to assist in the development of the FAST Protocol SM and execution of the POC.

