

Redline utilizes CSPI's Myricom Products on Windows-based platforms for low-latency book building and distribution of market data



OVERVIEW

■ Industry

Low-latency Automated Trading

■ Challenge

Ultra-low latency, high throughput, deterministic market data acquisition and distribution.

■ Solution

Redline's InRush™ Ticker Plant running on the Windows Server platform utilizes Myricom® networking adapters with DBL™ for low-latency, predictable delivery of market data to Windows-based client consumers also utilizing Myricom adapters.

Redline Trading Solutions designs and deploys ultra-low latency financial market data and order execution systems that enable their customers to excel in today's equities, options, futures, and foreign exchange markets.

Redline's InRush Ticker Plant is a highly optimized enterprise-class ticker plant that terminates market data from multiple feed sources on a fraction of a single server. InRush maintains full-depth books for all symbols on the wire with an emphasis on low latency and determinism. Running on industry-standard Intel-based multicore servers, InRush delivers ultra-low latency intelligent trading information to advanced financial trading applications.

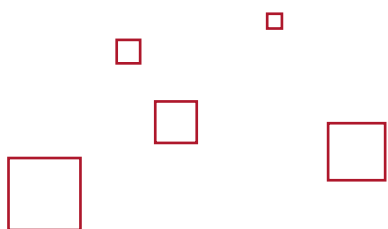
Challenge

The rapid evolution of trading technology, market opportunities, and regulatory scrutiny has redefined the requirements on automated trading solutions. It is no longer enough for trading systems to meet the foundational requirements of ultra-low latency and deterministic processing at high message rates in support of real-time trading decisions. Solutions for market making, high frequency trading, algorithmic order execution, and smart order routing also need to be cost effective to deploy, easily integrated into existing infrastructure, and rapidly programmed to address shifting trading strategies.

Solution

Redline Trading Solutions' InRush3 Ticker Plant collects, analyzes and distributes market data across ultra-low latency and highly deterministic feeds to meet the reliability and time critical requirements of automated trading firms. The InRush Ticker Plant incorporates the leading edge Myricom 10GbE networking technology in a Windows Server®-based platform to acquire and distribute data to Windows-based clients (See Figure 1).

The Myricom network adapters with DBL software feature kernel bypass techniques which allow the user-level application to communicate directly with the network adapter, eliminating the latency and overhead incurred by interactions with the operating system. Leveraging both the DBL Application Programming Interface (API) and the complementary Transparent Sockets Acceleration mode, the Myricom implementation provides the lowest latency, and most predictable, repeatable performance for UDP Multicast and TCP order execution.



“Working with CSPI’s Myricom team we found a partner that understood our issues and helped us optimize our application to their network adapters. We recommend Myricom to our Windows-based customers because it is the fastest solution on the market for high volume data transmissions at low latency.”

Lee Fisher

VP of Marketing, Redline Trading Solutions

Results

Achieving single-digit microsecond latency from receipt of market data to delivery of the tick to the user’s application, this joint solution with Redline and CSPI’s Myricom products meets the performance requirements of ultra-low latency trading without forcing firms who have standardized on Windows-based application development to switch to Linux or FPGAs.

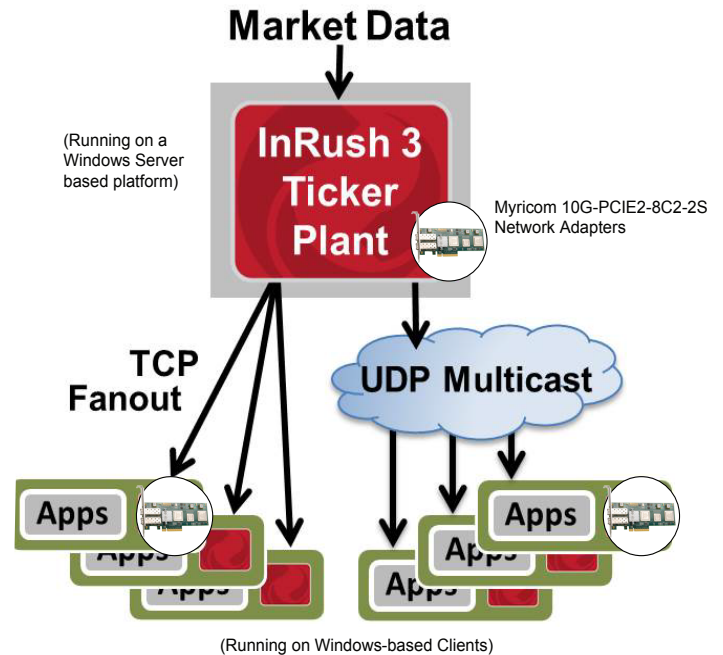


Figure 1. Enterprise Market Data Distribution using InRush 3 Ticker Plant and Myricom 10GbE network adapters with DBL on Windows-based platforms.