

Low-Latency Packet Processing Software Intended for High Frequency Trading Applications

6WIND, the industry standard for commercial multicore packet processing software, today announced the availability of a low-latency network layer as part of its 6WINDGate software solution. Optimized for high-frequency trading (HFT) applications, 6WINDGate provides low-latency protocols such as TCP Proxy (Termination and Retransmission), IP Forwarding and firewall. Along with 6WINDGate's high-performance routing capabilities, these enhancements allow HFT Networking Equipment manufacturers to provide solutions without difficult-to-maintain, custom hardware technologies based on FPGAs or ASICs.

On GE's WANic 56512 IP packet processor board, configured with a 750MHz Cavium OCTEON processor, 6WINDGate provides a latency of below 10 microseconds on the TCP Proxy function, compared to a typical latency in the millisecond range on an off-the-shelf server platform running a standard Linux distribution.

The HFT market involves the use of sophisticated tools for trading securities such as stocks and options. This requires the automated analysis of market parameters to capture trading opportunities that may open up for as little as a fraction of a second. With high-frequency trades executing in microseconds, minimizing the delay between market data analysis and trade submission increases the effectiveness of trading algorithms and maximizes the probability that a trade generated using that data will be executed.

HFT networking equipment must provide ultra-low latency performance, which implies the use of boards that leverage the latest multicore processors in order to maximize system-level performance. Off-the-shelf servers running standard operating systems are too slow and their performance is not deterministic. Networking software used in HFT equipment must be quickly deployable on a selected multicore processor with the confidence that it will deliver optimized performance on that platform.

"We have extended our 6WINDGate software solution to deliver a complete, turnkey low-latency networking layer with complex protocols optimized for HFT networking equipment, such as TCP Proxy and firewall," said Eric Carmès, CEO of 6WIND.

"OEMs developing HFT solutions benefit not only from the best-in-class performance delivered by 6WINDGate but also from its support of open APIs, which enable the efficient integration of custom, proprietary financial applications together with the low-latency 6WINDGate networking layer. By supporting a wide range of industry-leading multicore architectures, this new release provides our customers with maximum flexibility in their selection of hardware platforms."

"6WIND's low-latency network layer is highly complementary to our WANic PCI Express packet processor boards," said Vibhoosh Gupta, Telecom Segment Leader at GE Intelligent Platforms. "The combination of 6WIND's high-performance TCP

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Proxy function and GE's optimized hardware solution results in a compelling system solution for HFT equipment manufacturers."

The 6WINDGate low-latency TCP Proxy function will be available in Q4, 2011, with additional low-latency functions planned for availability 2012. For more information please visit <http://www.6wind.com> [1].

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Links:

[1] <http://www.6wind.com>