Ultra Low-Latency Reliable Multicast for Market Data

Overview
NovaSparks is announcing an ultra-low latency Reliable Multicast capability using the new Arista 7124FX switch for reliable multicast distribution of market data streaming from the NovaSparks FPGA Market Data Matrix©.

Benefits of an Integrated Arista-NovaSparks Solution
Leveraging the Arista FX platform to implement a reliable delivery solution downstream to its appliance provides a number of key benefits:

- **Lower latency**
  Because retransmission requests are handled in FPGA, they can be served with the lowest possible latency and allow the consumer application to quickly receive the missing packets to resume processing.

- **Seamless Integration**
  Because FASTLink is an FPGA to FPGA connection, it provides a fast and seamless integration between the NovaSparks appliance and the Arista FX switch.

- **Reduced footprint**
  By embedding the storing and retransmission mechanism in the network, customers are able to roll benefit from a reliable multicast solution from within their switch without the need from additional equipment.

- **Network optimization - Deployment Options**
  By offering both a local and a remote deployment option, customers can optimize the usage of their network and reduce the risk of broadcast storms.
Arista 7124FX - Application Switch
The Arista 7124FX provide 24-ports of wirespeed and ultra-low latency 10Gb Ethernet using the flexible SFP+ package, 8 of those ports route through a dedicated and fully-programmable FPGA-based application acceleration engine where customers can load their own custom applications. The FPGA supports 160Gbps of throughput and offers over 6 million programmable logic gates to run high-performance and mission-critical applications in the network as well as an on-board Chip Scale Atomic Clock and enterprise-grade SSD storage system. The 7124FX couples application logic and high performance execution with a true data center class switch that forwards L2, L3, and IP Multicast frames at 360Mpps and 480Gbps with only 480ns port-to-port latency at all frame sizes.

The Arista 7124FX is most commonly used in financial applications where you want the application to be as close as possible to the data source or inline with the data stream. This enables increased competitive advantage when coupled with the deterministic and ultra-low latency forwarding path. Other applications include financial services exchanges, government, defense, video transcoding and the high performance computing world.

About Arista Networks
Arista Networks was founded to deliver cloud networking solutions for large data center and compute environments. Arista's award-winning best-of-breed Ethernet switches redefine scalability, robustness, and price/performance. At the core of Arista's platform is EOS, the world's most advanced network operating system. Arista Networks markets its products worldwide through distribution partners, systems integrators and resellers.

Additional information and resources can be found at: http://www.aristanetworks.com

About NovaSparks
NovaSparks offers the industry’s fastest feed handlers providing deterministic nanosecond speeds. Unlike hardware accelerated approaches still dependent on CPUs, NovaSparks uses a matrix of FPGAs in its core. Called the FPGA Market Data Matrix, the feed handlers are specialized for ultra-low latency trading and deliver normalized data for the top equity and futures venues across North America and Europe.

For additional details please contact us at sales@novasparks.com or visit our web site: www.novasparks.com.