



## **CASE STUDY – Securities Trading**

### **MAJOR STOCK EXCHANGE LEVERAGES 10G TOOL INVESTMENT**

**Provides visibility into hundreds of links with minimal number of network analysis tools**

Datacom Systems SINGLEstream™ reduces number of probes required

**Industry:** Securities trading

**Objective:** Provide on-demand troubleshooting access to over 80 10G client links and create internal revenue stream by selling performance monitoring service to individual clients

**Approach:** 10G links flow through the device which does not block or add latency to network traffic. A copy of network traffic is internally switched to provide data copies to network forensics and protocol analysis tools. This allows diagnosis and resolution of connectivity and performance issues for clients that purchase market data feeds and trading application connectivity.

#### **Technology Improvements:**

- Immediate selective remote tool access available to any link with reported issues
- Passive fiber tapping ensures zero impact on network and non-aggregated output provides visibility into 100% of traffic with no risk of packet loss
- Stacking feature of device allows easy expansion as additional client links are put into service

#### **Business case:**

- Use of switching technology allows full line rate 10G capture tools to be dynamically directed to any network link, with up to 80 links available, allowing reasonable per client cost for analysis
- Rapid problem resolution improves up-time percentage – clients not using the service see the success of their competitors and purchase same fee based service – increasing both client satisfaction and revenue for stock exchange

#### **Maximizing Client Performance**

The stock exchange is a major US based firm with global operations and data centers that host their own trading floor applications. In recent years the business model has expanded to include co-location services for major investment banks and securities trading firms who use the services of the exchange.



Clients pay ongoing contract fees to receive low latency high speed connections for market data feeds and trading applications - crucial for maintaining a competitive edge in today's increasingly automated trading environment. The tangible dollar value losses associated with slow performance or loss of connectivity dictate that any data access and capture solution which is deployed must reduce MTTR (Mean Time To Resolution) to an absolute minimum.

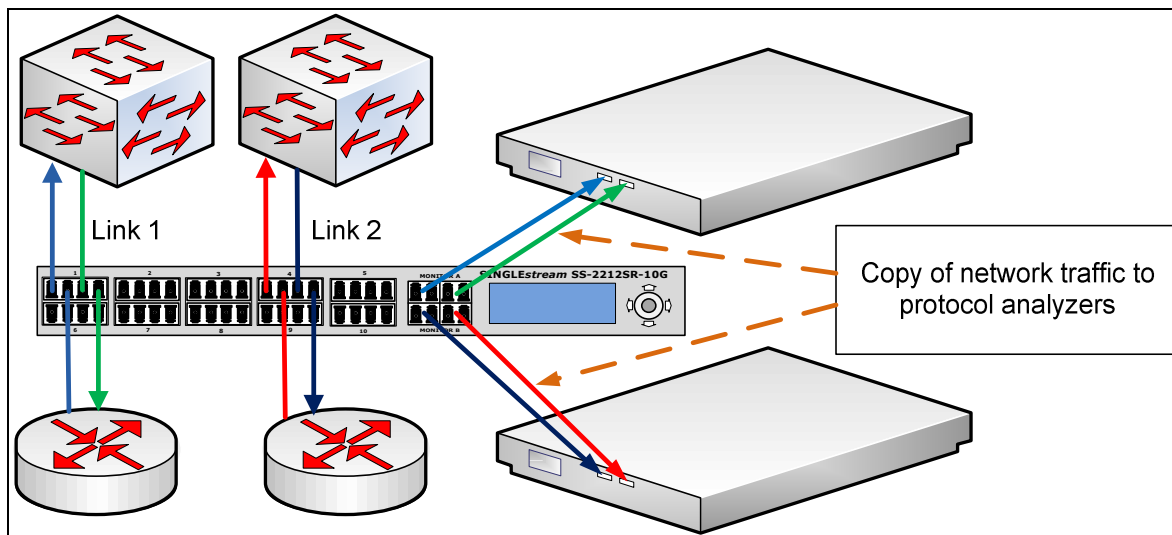
### **Challenge: The Cost of High Performance 10G Monitoring Tools**

The premier 10G packet capture and analysis tools used in enterprise data networks start at \$125,000 per probe – and up. Deploying eight 10G tools means a capital investment of over \$1,000,000 - not including costs for software renewals, maintenance etc. In a data center with hundreds of 10G links that need complete network analysis visibility in an instant – a solution is required that can leverage the investment in tools and allow them to be used selectively on multiple points of interest. Tool access must be available as needed and where needed, with an intuitive remote interface that allows engineers to quickly and easily gather data to resolve issues.

### **Solution: SINGLEstream™ SS-2212-10G**

The challenges faced by a market exchange require link tapping and directed output to analysis tools, in minimal rack space. The SS-2212-10G family of products was designed by Datacom Systems to meet these specific requirements:

- 1RU rack space consumption with ten integrated 10G taps (SR or LR links or custom mix)
- 100% of packets available. Non-aggregated output provides full visibility to non-standard or error packets
- Simple Command Line Interface allows remote users to quickly connect either or both of the attached capture and monitoring tools to the desired point of interest
- Stacking feature allows up to eight units to be interconnected – tools can be leveraged across up to 80 links
- Field proven reliability of Datacom SINGLEstream™ products provides assurance that the network and analysis will be accomplished with minimal risk



**Figure 1- Datacom Systems SS-2212-10G passively taps 10G links, then directs copies of traffic to protocol analyzers**

**Conclusion: SINGLEstream™ SS-2212-10G**

Datacom Systems SS-2212-10G allows customers to see 100% of 10G traffic on network analyzers without risking link failure. Copies of traffic can be directed to internal resources, or sold as a service to end users to validate their Service Level Agreements. The SS-2212-10G permits the purchase of a lower port density 10G analyzer representing a better return on investment for analysis.