– Glimmerglass & Niagara Networks Enterprise-level Network Security SolutioN –

Complete Network Visibility/Inspection

Glimmerglass, a leader in Cyber Security and Niagara Networks, a leader in Network Visibility and Uptime Solutions have partnered to ensure optimal network security by providing access to and inspection of high throughput Enterprise network links in real-time, while offering flow-by-flow analysis at strategic points in the network.

The joint Glimmerglass and Niagara Networks solution offers a cost-effective way to deliver highly tuned network visibility, layer 7 application analysis, visualization of traffic and user patterns and flow-based intelligence with the capability to profile the network. Together, Glimmerglass and Niagara Networks ensure a passive network security solution that will safeguard precious Enterprise network data and resources while ensuring network uptime.

Challenge

Providing sustainable network stability and security is as much about flexibility and adaptability of the security solution itself as it is about feature set. Today, simply reacting to or even stopping typical security threats before they happen is not enough; the ability to drill down into the behavior of users and network traffic patterns to make preemptive and intelligent assessments that can help shape network and security policy is absolutely essential.

In addition, being able to thoroughly analyze and visualize these network/user patterns to develop actionable data is very complex. As more network nodes are being connected to one another, throughput is exponentially increasing and network security threats are becoming ubiquitous and evermore sophisticated.

A solution that is nimble, sophisticated, supports various speeds and security tool entry points, and provides adaptive security threat detection and thorough network traffic analysis, correlation, and reporting is required.

Solution

Together, Glimmerglass and Niagara Networks provide a scalable solution that provides Network Access at 1G and 10G Critical Network links and can provide visibility into the appropriate network traffic for Layer 7 application identification and inspection, visualized reporting and threat detection. The Network TAP ports of the Niagara 2804 connect to each side of one or multiple bi-directional 1G or 10G network links and transparently pass network traffic while ensuring network uptime in case of any power failure, link loss or software crash via fail-to-wire protection.

Solution Benefit Summary

• Plug & Play, User friendly Web GUI/Management

• Scalable Enterprise Grade Visibility & Security Solution

• Ensures Comprehensive Network Access, Visibility and uptime

• Support for 10G & 1G Network TAP, Filtering, Mirroring, Aggregation, Load Balancingand Speed Conversion between Network Links & Monitoring/Security Tools

• Continuous Monitoring and Breach Detection

• Comprehensive Network Forensics

• Software based Sensors can be deployed on commodity hardware or in virtual environments

• Detection via Analytics, Signature, Behavioral and File Analysis

• Query and Visualize Network Traffic

• Network Analytics, Reporting and Alerting

• Cost-Effective Solution

The Packet Broker ports (which come in empty cage 1G/10G flexible SFP+ ports) provide the ability to load balance, aggregate, filter and/or mirror the tapped Network traffic to one or multiple VectorSweep appliances. VectorSweep provides comprehensive passive monitoring and security functions including decoding and classification of 250+ protocols and 100+ applications, including web applications and TLS/SSL protected applications, via metadata extraction. This provides sophisticated, timely and efficient situational awareness of network behavior.

Solution Applications

Common applications of the Niagara Networks Niagara 2804 and VectorSweep solution are as follows:

- The Niagara 2804 provides session based loadbalancing and network speed conversion which enables 10G Network links to be monitored by VectorSweep 1G Security/Monitoring appliances. With the Niagara 2804 in place, an enterprise that is upgrading from 1G to 10G networks and already has 1G VectorSweep appliances in place can simply connect 10G Network links into the Niagara 2804 and loadbalance the 10G feed to multiple 1G VectorSweep appliancesand maintain session integrity

- The Niagara 2804 provides ability to Filter 10G traffic based on IP, MAC, Port, Protocol, VLAN ID or creating a user defined byte and then sending only the traffic that is relevant to the VectorSweep for processing, enabling the VectorSweep to focus on the types of network traffic that poses a threat to the network and drop the rest. An example would be to take in a 10G feed and filter out HTTP traffic (Port 80 traffic) and send only that traffic via a Niagara Packet Broker port to a port on the VectorSweep

- Niagara 2804 provides the capability to take in a 10G or 1G network feed and mirror that traffic to multiple VectorSweep systems (or multiple VectorSweep devices or various brands of monitoring or security devices) to provide in depth or multi-layered analysis on the same critical network link

- The Niagara 2804 can allow the VectorSweep to send a TCP Reset Packet back into the stream of traffic to terminate a flow in the case of a security vulnerability that already exists in the network; an example of this would be if a network user is sending a Social Security number of an employee from inside the network (LAN) to the greater internet (WAN) , the VectorSweep will be able to send a termination request to Niagara 2804 which will handle the termination of that particular flow in real time

- VectorSweep™ and Niagara 2804 together can effectively block anomalous traffic to/from particular hosts. VectorSweep™ can detect anomalous behaviors that may be part of an attack mechanism. Those responsible hosts can be identified by IP or MAC address(es) and then the addresses can be used by the Niagara 2804 to block traffic to/from the suspect hosts.

- VectorSweep™ and the Niagara 2804 together can also be used to filter out traffic types that are identified as undesirable. VectorSweep™ analytics may identify a protocol that is being used in a nefarious way. Feeding this information to the Niagara 2804 allows that traffic to be diverted for further analysis or to be blocked altogether.
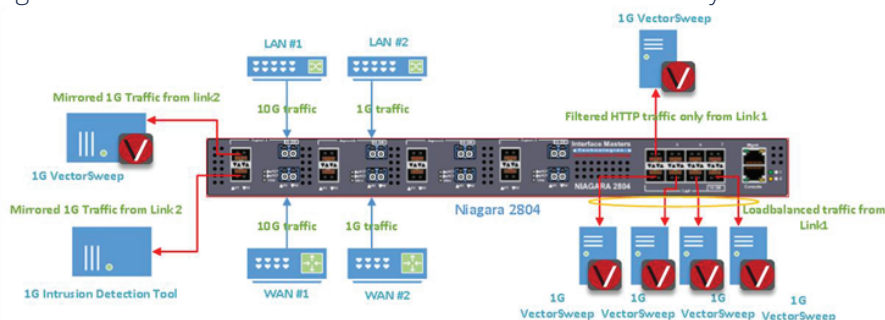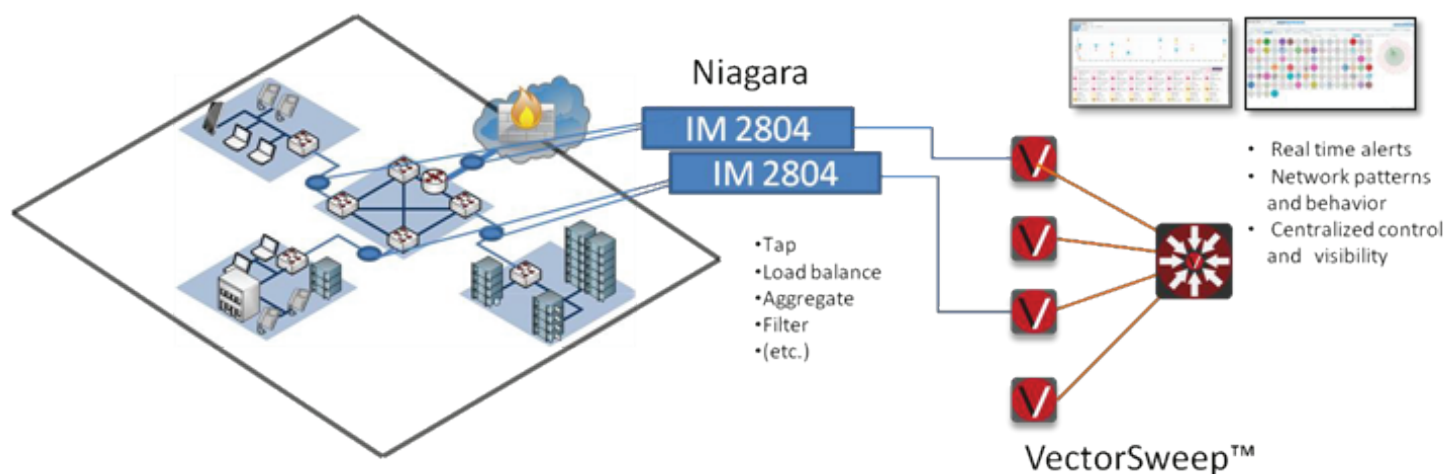

Application Diagram – Niagara 2804 and Vector Sweep Inspector

Deployment Options

The Solution can be passively deployed at any strategic network point including:

- Core/BackBone
- Distribution
- Access

- Site to Site
- Corporate Backhaul
- Remote Office

- Edge
- DataCenter/Central Office
- DMZ

About Glimmerglass

Glimmerglass Cyber Solutions is a premier provider of cyber security and intelligence solutions serving the enterprise, government, and service providers security market. VectorSweep monitors and analyzes machine communication flow metadata to reveal hidden threat vectors within enterprise networks. Real-time, actionable insights give network analysts visibility and control of the massive flows of traffic occurring within the enterprise network. For more on Glimmerglass Cyber Solutions, please visit our website: www.glimmerglass.com

About Niagara Networks

Niagara Networks is a Network Visibility industry leader, with emphasis in 1/10/40/100 Gigabit systems including Network TAPs, External Bypass Switches, and Network Packet Brokers that integrate with monitoring systems, inline networking appliances, IPS, UTM, Load Balancing, WAN acceleration, and other mission-critical IT and security appliances. Formerly part of Interface Masters, a Silicon Valley based network solutions company, Niagara Networks recently spun off from Interface Masters to focus on its core competencies, and developed an independent company identity.

Niagara Networks offers the highest port-density systems, the most complete hybrid systems, and the highest quality and feature-rich Bypass Solutions in the market. Niagara's unique and modular designs, innovative next generation Network Visibility technology, including the 100 Gigabit-capable Network Packet Broker with hybrid functionality, and the ability to tailor systems to exact customer specifications, allow it to lead the industry with high quality, innovative products and exceptional service. For more information, please go to: www.niagaranetworks.com

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