



HAVE YOUR 10G NETWORK AND KEEP YOUR 1G MONITORING TOOLS

Best Practices



Have you noticed that your network complexity is escalating? Data traffic is exploding, new and sophisticated threats are searching for weaknesses, and networks are moving to 10G – and the move to 40G and on to 100G is coming fast.

As the volume of traffic increases on your 10G network links, it outstrips both the bandwidth of 1G tool interfaces and the processing speed of the tools – resulting in tool oversubscription. When tools are oversubscribed, packets are dropped and analysis is hampered, compromising performance diagnostics and security.

With VSS systems, your analytics, security, and WAN acceleration tools can get the traffic of interest from 10G connections and not be saturated with unwanted traffic. VSS systems filter traffic to a manageable flow rate to ensure that 1G monitoring device interfaces are not overwhelmed by the increased line rate.

Access All Your 10G Connections ...

VSS solves the problems of visibility and access. VSS network intelligence optimization systems reside between network infrastructure and your network intelligence - analytics, security, and WAN acceleration tools. VSS systems can be deployed throughout the entire network to provide complete network data to all tools. An interconnected layer of VSS systems, purpose-built for network intelligence optimization, provides complete network coverage by collecting a copy of traffic at multiple points. Traffic of interest is sent to all your tools – in real time.

The fully-redundant, self-aware, scalable VSS system provides complete network visibility, even across the Cloud.

Key Benefits:

- Eliminate SPAN/Mirror Port contention
- Eliminate “blind spots” and achieve total network visibility
- Easily provide full network data to all your tools with no need to prioritize or compromise, even across the Cloud

... While Making Your 1G Tools Work More Efficiently

The VSS systems capture all network traffic and filter it, sending only traffic of interest to your analytics, security, and WAN acceleration tools. Your tools can run at capacity, avoiding over subscription or under subscription.

The fully customizable hardware-based filtering capability is performed at full line rate, on all traffic streams continuously. Tools see only the traffic of interest according to capacity. This reduces the load to each device and makes it possible to use 1G tools to monitor and analyze 10G traffic, maximizing the ROI of your existing network infrastructure and tool investments.

Key benefits:

- Deliver only relevant information to tools, letting tools perform at capacity
- Maximize ROI of existing monitoring infrastructure
- Monitor 10G networks with existing 1G monitoring tools without sacrificing accuracy

Use VSS to Gain Visibility 24 x 7 and be Prepared for Any Anomaly

VSS provides capabilities beyond simply providing total network visibility, and allowing you to easily use your 1G tools with 10G network links.

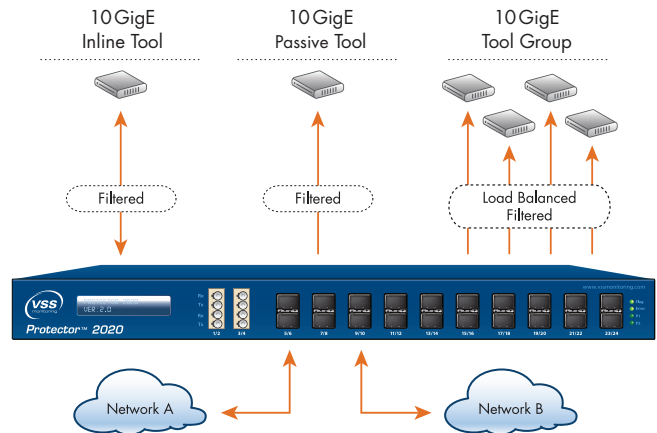
If more traffic grooming is needed to prevent oversubscription to tools that are overwhelmed by heavy traffic, VSS session-aware load balancing can split the traffic and have multiple tools operate on different portions of it. For example, if you have multiple 1G flow data analyzer tools, you can filter the critical network information and equally distribute 1G bandwidth to each analyzer tool.

VSS's highly granular session-aware load balancing maintains packet-order integrity for any given conversation, as well as guarantees a consistent output port for any single conversation. This ensures that a tool will see every packet of a given conversation or protocol session in the correct order.

In addition, VSS Systems can handle forwarding of bursty network data that grossly exceeds the average utilization of a high bandwidth port, without losing any of the packets – such as when spreading traffic from one 10G network port across several 1G monitor ports.

Key benefits:

- On-the-fly flexibility of directing traffic streams to tools
- Easily add new tools as you scale your network
- Reduce operational costs while achieving greater network control



Use 1Gps Tools to Monitor and Protect 10Gps Environments without Sacrificing Accuracy

For More Information

For more information, visit http://www.vssmonitoring.com/solutions/span_port_contention.asp.



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VSS Monitoring, Inc. is the world's leading innovator of Distributed Traffic Capture Systems and network taps, focused on meeting the rapidly evolving requirements of security and performance conscious network professionals. Distributed Traffic Capture Systems herald a new architecture of network monitoring, one which fundamentally improves its capability and price-performance.

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