Interface Masters

T E C H N O L O G I E S

Innovative Network Solutions

Reservoir Labs

Reservoir Labs and Interface Masters Solution Brief

Introduction

Interface Masters and Reservoir Labs have partnered together to develop an innovative, scalable network security solution. This joint solution incorporates the R-Scope DOMINATE appliance from Reservoir Labs and Interface Masters Niagara 2842 Network Packet Broker.

R-Scope DOMINATE is a network security monitor that extracts application layer metadata from network flows. Customers are interested in this metadata to gain high levels of situational awareness for both security and operations. R-Scope DOMINATE can processes up to 100G in a single machine through sixteen 10G ports.

Network security monitoring allows an enterprise to gain visibility into their network traffic at the border or within the datacenter by dynamically extracting metadata from common network protocols in real-time. An example of the metadata extracted from an HTTP flow would include things like the user-agent string and the URI. Operators will log this metadata, typically to their Security Information and Event Management system (SIEM), to add context around events taking place on their networks. Security operations teams are increasingly using network security monitoring instead of full packet capture solutions because they can retain most of the relevant security information in the log data without paying the price of saving every packet.

Niagara 2842 is a modular Network Packet Broker supporting 1G, 10G and 40G based on Interface Masters intelligent PacketMaster technology. The system also supports network Bypass, TAP and aggregation TAP for 1G, 10G and 40G. Niagara 2842 can handle up to 64 ports of 1G/10G and/or 32 ports of 40G. PacketMaster capabilities allow extensive Network Packet Broker capabilities for granular and accurate session based load balancing of network traffic, mirroring of one to many or many to many, extensive filtering, packet slicing and aggregation of many to one port.

Solution

R-Scope DOMINATE requires a tap or a mirror of network traffic and the Niagara 2842 is a cost-effective method for delivering traffic. The Niagara 2842 assists R-Scope by pre-conditioning traffic. Network traffic is often asymmetric with partially loaded links that can be aggregated together. A PacketMaster gathers traffic from many TAP points and SPAN ports, aggregating and load balancing the traffic appropriately.

Figure 1 illustrates incoming traffic from the network (can be 1G, 10G and/or 40G traffic) and being sent to the Niagara 2842 TAP module ports. This traffic is then aggregated and load balanced by the PacketMaster into 10G streams and sent to R-Scope to ensure the highest overall performance for R-Scope.

Unlike traditional security solutions deployed at the network border, the combination of Niagara 2842 and R-Scope DOMINATE scales to data center rates. Enterprises with racks of servers containing multiple 10G links per server now have a solution that allows them to instrument their networks for security monitoring.

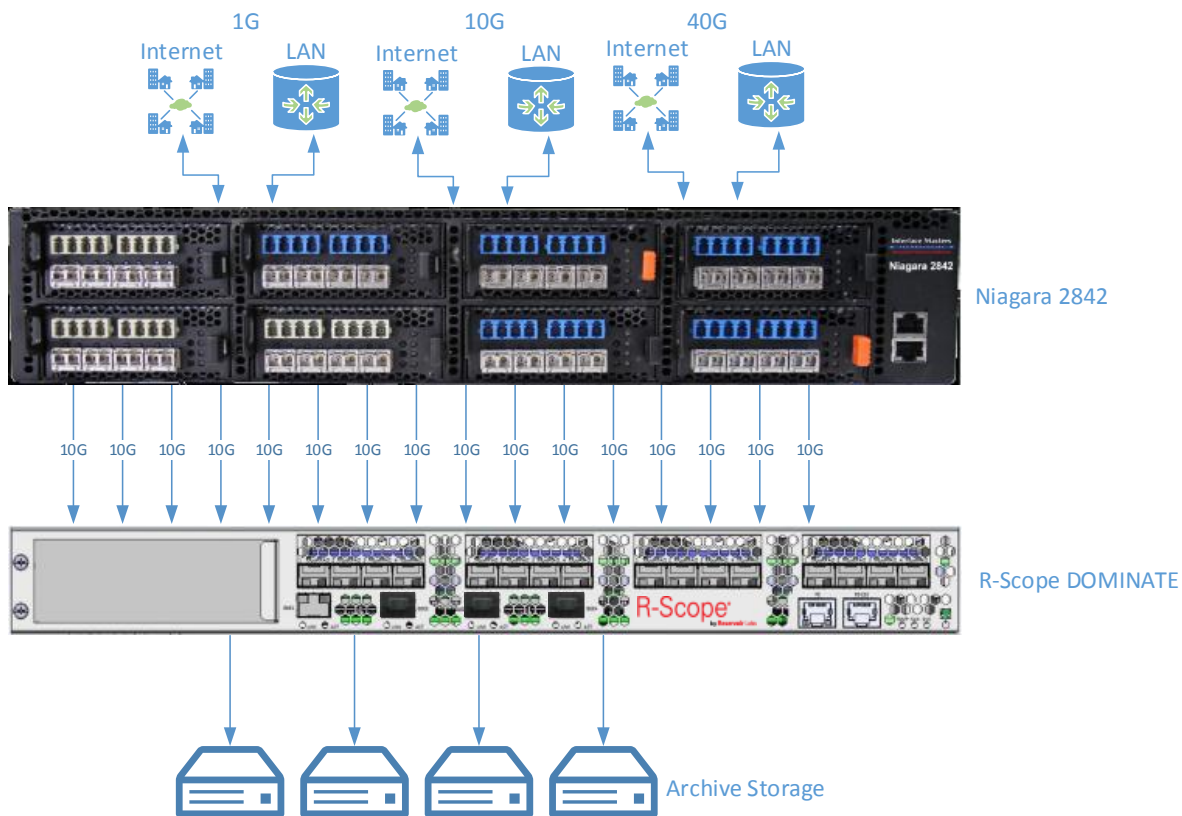# Reservoir Labs and Interface Masters Solution Brief

Figure 1: Network Diagram of Niagara 2842 and DOMINATE

About Interface Masters Technologies

Interface Masters Technologies is a leading vendor in the high speed network visibility market based in the heart of the Silicon Valley. Flagship product lines include Network Packet Brokers, specialized 10G and 1G internal server adapter cards and NICs, 1G, 10G and 40G switches, external intelligent Network TAP and Bypass and failover systems that increase network monitoring capabilities, network reliability and inline appliance availability. Company Headquarters are located in San Jose, CA with satellite offices in Hong Kong and Europe.

About Reservoir Labs

R-Scope® Network Security Monitoring Appliances, by Reservoir Labs, efficiently extract relevant cyber security data from network traffic. R-Scope can extract rich network metadata at up to 100 Gbps in a 1U appliance. R-Scope provides high levels of situational awareness for both security and operations creating increased visibility into the security risks traversing the network. Reservoir Labs, Inc., headquartered in New York City, provides custom solutions, innovative technology products, and leading-edge research and development services to government and commercial clients.