

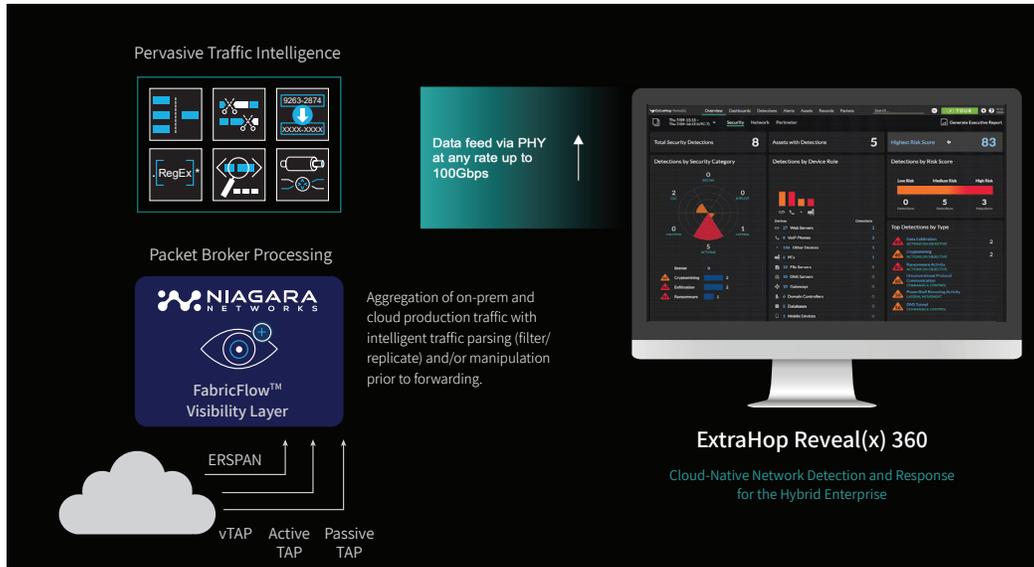
Solution Brief

ExtraHop and Niagara Networks

Empower SecOps with Actionable Traffic
Intelligence and Advanced Threat Defense

Introduction

The joint solution between ExtraHop and Niagara Networks packet brokers offers the best-of-breed solution to reduce risk and maximize security posture by empowering consistency of Network Detection and Response (NDR) to threats across heterogeneous environments of on-prem and cloud networks.



Challenges

Modern cyber threats are more prolific and sophisticated than ever before, requiring both Enterprise Organizations and Service Providers to constantly re-evaluate their detection and incident response posture. Many traditional tools like Intrusion Detection and Prevention Systems have failed to rapidly adapt to the current threat landscape and suffer from traditional deployment methodologies that focus exclusively on traffic to and from the internet while leaving organizations blind to threats inside their enterprise, cloud, and hybrid environments. NDR with integrated IDS capabilities is designed to address these shortcomings.

The only way to get value from sophisticated network security tools and an ever-growing cybersecurity budget is to ensure that packets (malicious or otherwise) can't reach the large span of the enterprise domain without being analyzed.

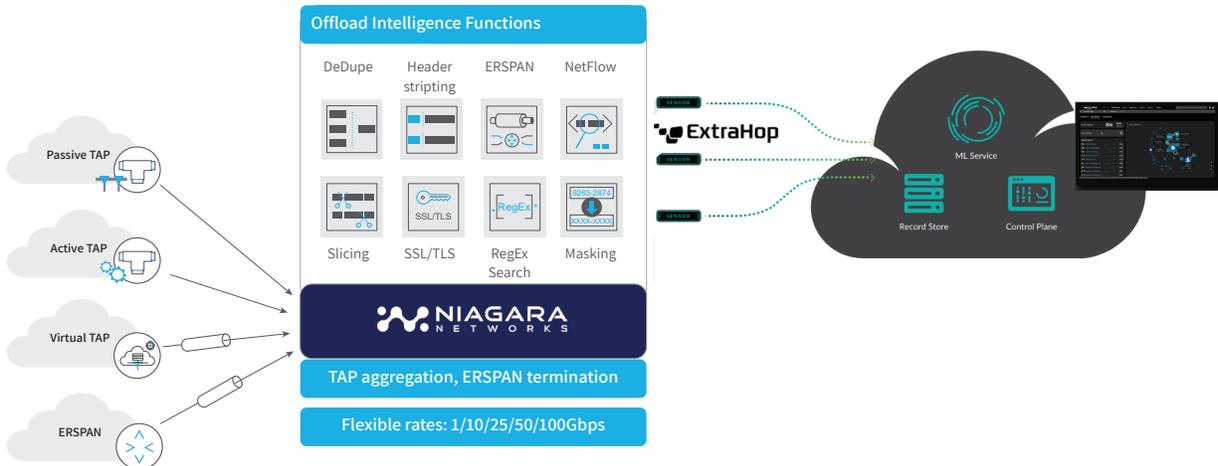
Creating a network visibility layer that properly routes packets without dropping them or negatively impacting performance is critical. Niagara Networks and ExtraHop have joined forces to solve these challenges, creating an agile integration that enables a unified high-performance solution with full packet visibility and traffic analysis across all network segments. The partnership provides a scalable and powerful NDR solution to address the following challenges:

- Complex and long SecOps processes in detection and response to threats and intrusions across heterogeneous environments of on-prem and cloud networks
- Traditional cybersecurity defenses lack the agility for rapid response against increasingly dynamic threats
- The enormous flood of data that can overwhelm a legacy security stack without effectiveness to separate signal from the noise

The joint Niagara Networks and ExtraHop solution enables deep visibility and regulation of the data traffic through multiple deployment scenarios and policy-based actionable threat detection and prevention through joint building blocks and holistic architecture that can be extended to state-of-the-art unified platform based on disaggregation, virtual hosting, service chaining in a multi-vendor security stack that can span a wide array of demarcation points of service.

Solution Benefits

Deployment architecture can be optimized for customer requirements and operational efficiency based on the modular approach or a highly integrated platform for a single rack solution offering.



With focused and optimized traffic flows from the Niagara Visibility platforms, the ExtraHop RevealX platform operates as an agile cybersecurity solution to deliver a highly scalable real-time threat detection and response solution with the following benefits:

- **360° Network Visibility**

SecOps gains complete network visibility with ExtraHop RevealX anomaly detections powered by machine learning for security threats and automated investigation. By integrating Niagara Networks' pervasive traffic intelligence and packet visibility that captures all traffic of interest from digital assets and optimizes intelligent traffic delivery to RevealX for comprehensive threat detection.

- **Simplified and Scalable Deployments**

The combination of ExtraHop RevealX and Niagara Networks solution makes it a perfect offering with a cost-effective business model and low TCO for midsize and large network deployments or remote locations at any rate and required micro-segmentation.

- **Data Aggregation and Packet Intelligence**

Working together, the Niagara Networks solution and ExtraHop provide efficient data traffic collection, aggregation, filtering, L2-7 packet parsing and reduction of false positives for security operations by intelligent removal of data traffic duplicates, that are delivered from network interception and aggregation points.

- **Ability to inspect encrypted traffic**

As an increasing amount of network traffic is encrypted, threat detection becomes harder. The complementary SSL/TLS

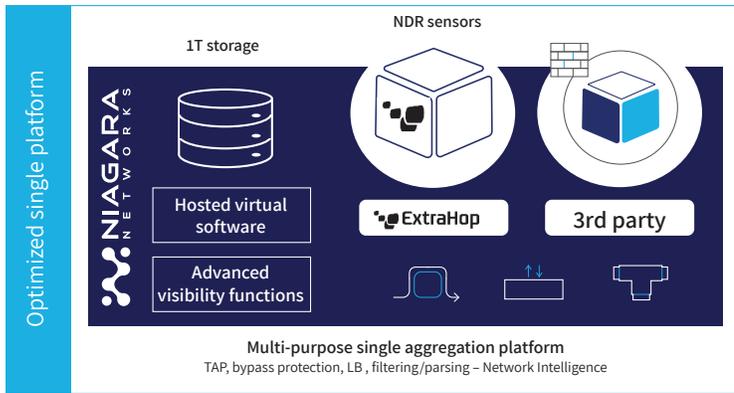
decryption capabilities can be architected for a scalable and modular approach to enable deep visibility and effectiveness of uncompromised edge-to-edge security operations. This joint solution optimizes SecOps with full compliance with privacy regulations while enabling deep visibility and inspection of encrypted traffic, including decryption of MS active directory services and a wide spectrum of protocols including Kerberos, NTLM, LDAP/s, MS-RPC, WINRM, SMBv3, and WMI.

- **ExtraHop RevealX Dashboard for actionable Visibility and Response**

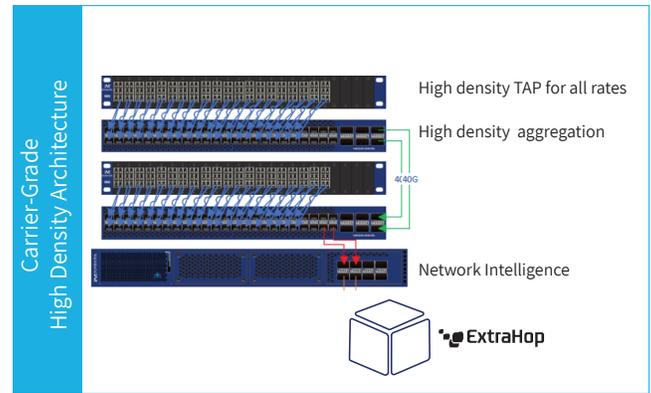
The precision and high fidelity of data optimization to ExtraHop Reveal(x) automatically generates the accurate attack visualizations that render to SOC the context it needs to quickly respond to cyber threats in seconds.

- **Choosing the all-in-one platform for operational agility**

A new style of advanced network packet broker with an open platform that can host and manage the security solutions that run on it. Niagara Networks Open Visibility Platform can host ExtraHop virtual sensors—a highly efficient architecture that can fit remote sites with the entire range of visibility and network intelligence functions and threat detection in a single appliance with NFV virtual hosting capabilities.



Solution for remote sites



Solution for mid-size and large installations

Integration Use Cases

Niagara Networks’ advanced packet brokers serve as a bridge platform that can be deployed in an enterprise or service provider environment, with extended visibility to private, public, and hybrid cloud. To enable the efficient collection and inspection of the entire spectrum of digital assets, an intelligent network aggregation tier is required to obtain the right sets of packet feeds to security tools. Strategic interception points in the network tapped via physical or virtual TAPs copy the traffic per defined network architecture policy. High density aggregation deployed to scale the multiple TAP links can accommodate even more needs in the future by grooming all intercepted traffic to Network Packet Broker solution and enable highly efficient aggregation architecture that can be deployed and provisioned by Niagara’s SDN-based software orchestration controller. This provides the right traffic steered at the required interface rates to ExtraHop RevealX architecture for threat detection, analysis, and response. An advanced and highly integrated solution can enable the same workflow, but with a new state-of-the-art migration to the Niagara Networks Open Visibility Platform in the future.

The Open Visibility solution can host NDR sensors virtually on a single appliance with hardware-accelerated traffic processing, including advanced packet manipulation functions such as header and payload slicing, masking, application filtering, metadata generation, overlay tunnel termination (ERSPAN, GENEVE, VXLAN, GRE, etc.) selective decryption, deduplication, and RegEx filtering for ultra-deep sophisticated packet conditioning use cases.

Deploying the ExtraHop RevealX NDR platform in conjunction with Niagara Networks Advanced Network Visibility solution provides the following benefits:

- Solves architectural complexity whilst creating clear segmentation, aggregation, and intelligent processing of network traffic to ExtraHop NDR
- Streamlines RevealX security analytics and advanced threat inspection and prevention
- Maximizes tool efficiency and scale-optimization of traffic capacity and reduction of duplicated and non-relevant headers and payloads to avoid false positives and processing overhead
- Reduces OPEX and CAPEX with optimized aggregation of TAP elements and operational simplicity
- Provides an ultra-high granular view of packet flows from any TAP use case including Niagara's CloudRay virtual TAP solution
- Offers advanced header stripping for overlay and underlay protocols: ERSPAN, FabricPath, GENEVE, GRE, NVGRE, VXLAN, VLAN, VN tag, PPPoE, GTP, MPLS (GRE), MPLS (IP), MPLS (UDP), and many more packet and flow intelligence rules to streamline security operations
- Ability to intercept 100% of traffic at 1Gbps, 5Gbps, 10Gbps, 25Gbps, 40Gbps, 50Gbps and 100Gbps of throughput, and any traversing communication protocols, including East-West traffic with a virtual TAP
- Ability to migrate seamlessly to Niagara Networks Open Visibility Platform for Next-Gen virtual tools adaption and operational agility

About ExtraHop

The risks facing organizations are harder to navigate, higher in impact, and frequently interrelated. And they threaten organizations' resilience and profitability in ways we never imagined because cyber risk is business risk.

ExtraHop is the cybersecurity partner enterprises trust to reveal cyber risk and build business resilience. The ExtraHop RevealX network detection and response platform uniquely delivers the instant visibility and unparalleled decryption capabilities organizations need to expose the cyber risks and performance issues that other tools can't see. When organizations have full network transparency with ExtraHop, they can investigate smarter, stop threats faster, and keep operations running.

To learn more, visit www.extrahop.com

About Niagara Networks

Niagara Networks provides high performance network visibility solutions for seamless administration of security solutions, performance management and network monitoring. Niagara Networks products provide advantages in terms of network operation expenses, downtime, and total cost of ownership. A former division of Interface Masters, Niagara Networks provides all the building blocks for an advanced Visibility Adaptation Layer at all data rates up to 100Gb, including TAPs, bypass elements, packet brokers and a unified management layer. Thanks to its integrated in-house capabilities and

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