

SOLUTION BRIEF

Fortinet and Niagara Networks Unite: A Dynamic Network Security Synergy

Empowering Network Security Excellence through Unified Analytics

Executive Summary

Fortinet and Niagara Networks unite to present a cutting-edge network security solution. With a joint commitment to excellence, Fortinet and Niagara Networks offer a comprehensive approach to network detection and response, boosting security across diverse on-premises and cloud environments.

The Challenges

Organizations grapple with redefining their security strategies as the cyberthreat landscape evolves. Conventional tools can no longer combat the rising tide of sophisticated attacks across on-premises, cloud, and hybrid networks. The overwhelming influx of data often inundates legacy systems, necessitating a solution that offers continuous visibility and analysis of all traffic while maintaining robust security. Niagara Networks and Fortinet have partnered to deliver a scalable and powerful network detection and response (NDR) solution that optimizes traffic for analysis, delivering integrated network and application visibility for both on-premises and public cloud environments.

Joint Solution

Niagara Networks and Fortinet have partnered to deliver an industry-leading NDR security solution to address these challenges. The integration of the Niagara Networks Open Visibility Platform product and Fortinet FortiNDR, enabled through the Fabric-Ready Program in the Fortinet Open Fabric Ecosystem, enables deep visibility and regulation of the data traffic through multiple deployment scenarios. It also offers policy-based actionable threat detection and prevention through joint building blocks and holistic architecture. This can be extended to a 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 Components

Depending on customer requirements, the joint solution can be deployed as a modular or integrated solution to deliver a highly scalable real-time threat detection and response solution.

The Niagara Networks Open Visibility Platform is an open platform that can host and manage security solutions. It hosts FortiNDR, which is 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.

Solution Components

- Niagara Networks Open Visibility Platform
- Fortinet FortiNDR

Solution Benefits

- 360° network visibility: Encompassing on-premises, cloud, and hybrid environments
- Efficient data traffic collection: Intelligent packet parsing and manipulation reduces false positives
- Consistency of NDR analytics: Empowering uniform security across diverse environments
- Advanced actionable insights: An advanced dashboard for enhanced visibility and response
- Simplified network architecture: Scalable visibility across all layers for effective security operations



FortiNDR enables full life cycle network protection, detection, and response. It leverages AI, ML, behavioral, and human analysis to analyze network traffic so security teams can spot attacker behavior and remediate threats. FortiNDR provides network traffic and file-based analysis, root-cause identification, scope of incidents, and the tools to remediate incidents quickly.

Joint Solution Integration

Niagara Networks' advanced packet brokers act as a versatile bridge platform, ideal for deployment within enterprise or service provider environments. This platform offers extended visibility across private, public, and hybrid-cloud environments. An intelligent network aggregation layer is essential to channel appropriate packet feeds to security tools to efficiently collect and inspect a wide spectrum of digital assets. Strategic interception points within the network, facilitated by physical or virtual TAPs, capture and replicate traffic according to defined network architecture policies. High-density aggregation ensures scalability, accommodating future needs by directing intercepted traffic to the Network Packet Broker solution. This efficient aggregation architecture is orchestrated through Niagara's SDN-based software controller.

Relevant traffic is directed to the FortiNDR architecture at required interface rates for threat detection, analysis, and response. While the advanced and highly integrated solution maintains this workflow, future advancements will include a migration to the state-of-the-art Niagara Networks Open Visibility Platform.

The Open Visibility solution offers the capability to virtually host NDR sensors on a single appliance, featuring hardware-accelerated traffic processing. It encompasses advanced packet manipulation functions, such as header and payload slicing, masking, application filtering, metadata generation, and tunnel termination (ERSPAN, GRE, VXLAN, GENEVE), along with selective decryption, deduplication, and RegEx filtering. This array of advanced features ensures ultra-deep packet conditioning for sophisticated use cases.

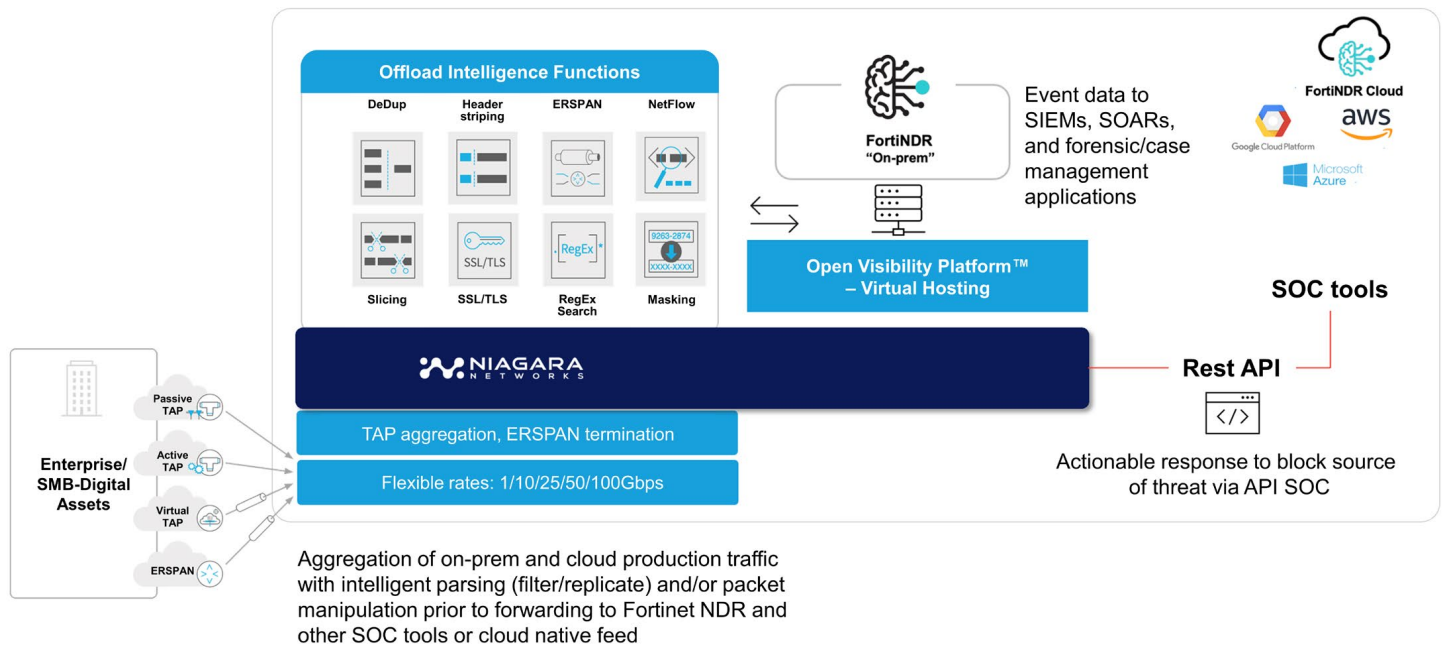


Figure 1: The Fortinet and Niagara Networks integration architecture



Joint Use Cases

On-premises aggregation: Efficient aggregation of on-premises traffic with intelligent parsing before forwarding to FortiNDR, enhancing direct or API connection to SOC tools.

Cloud hybrid mode: Seamless cloud-native or hybrid traffic aggregation, incorporating intelligent parsing for forwarding to FortiNDR via cloud-native feed tunneling.

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 tailor-made development cycle, Niagara Networks are agile in responding to market trends and in meeting the customized needs of service providers, enterprise, data centers, and government agencies. For more information, please visit us at www.niagaranetworks.com



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