

SOLUTION BRIEF

# Fortinet and Niagara Networks Integrated Carrier-Grade SD-WAN Solution

**Agile Architecture for Secure SD-WAN deployments in order to ease operational efficiencies for SecNetOps teams and enable visibility across all digital assets**

## Executive Summary

Fortinet Security-driven Networking is empowered by the innovation of SD-WAN to enable application-aware, secure backhauling connectivity services to enterprise networks.

This next-generation wide-area overlay networking approach provides consistent security enforcement across perimeters by combining a next-generation firewall with advanced SD-WAN networking capabilities.

Fortinet Secure SD-WAN integration with Niagara Networks visibility solution extends the real-time visibility of packet data to cover all digital assets. The integration also enables NetSecOps to efficiently manage large and complex carrier-grade Secure SD-WAN deployments, spanning across multiple perimeters of branches, private cloud, and hybrid cloud environments.

## Challenges

As digital transformation continues to drive new IT strategies in various enterprises, considerations of the alternative SD-WAN versus their traditional, costly WAN connectivity started to be the de-facto IT reality. However, operational efficiency with centralized orchestration and enhanced analytics for SD-WAN, security, and SD-Branch are paramount to overcoming IT pragmatic operational challenges by ensuring accelerated network and device convergence with carrier-grade resilience.

## Joint Solution

Fortinet and Niagara Networks have partnered to deliver an industry-leading joint solution to address these challenges. The integration of Niagara Networks Open Visibility solution and Fortinet Secure SD-WAN, enabled through the Fabric-Ready Program in the Fortinet Open Fabric Ecosystem, delivers unparalleled visibility, high-availability, and security for SD-WAN deployments.

Niagara Networks expands the spectrum of the traditional packet brokers, bypass switches, and network TAPs by enabling cutting-edge NFV-based virtual hosting for FortiGate-VM applications and adding additional third-party tools as part of the same virtual service chain in Niagara's Open Visibility Platform or as a modular distributed cluster of the visibility infrastructure that supports SD-WAN various use

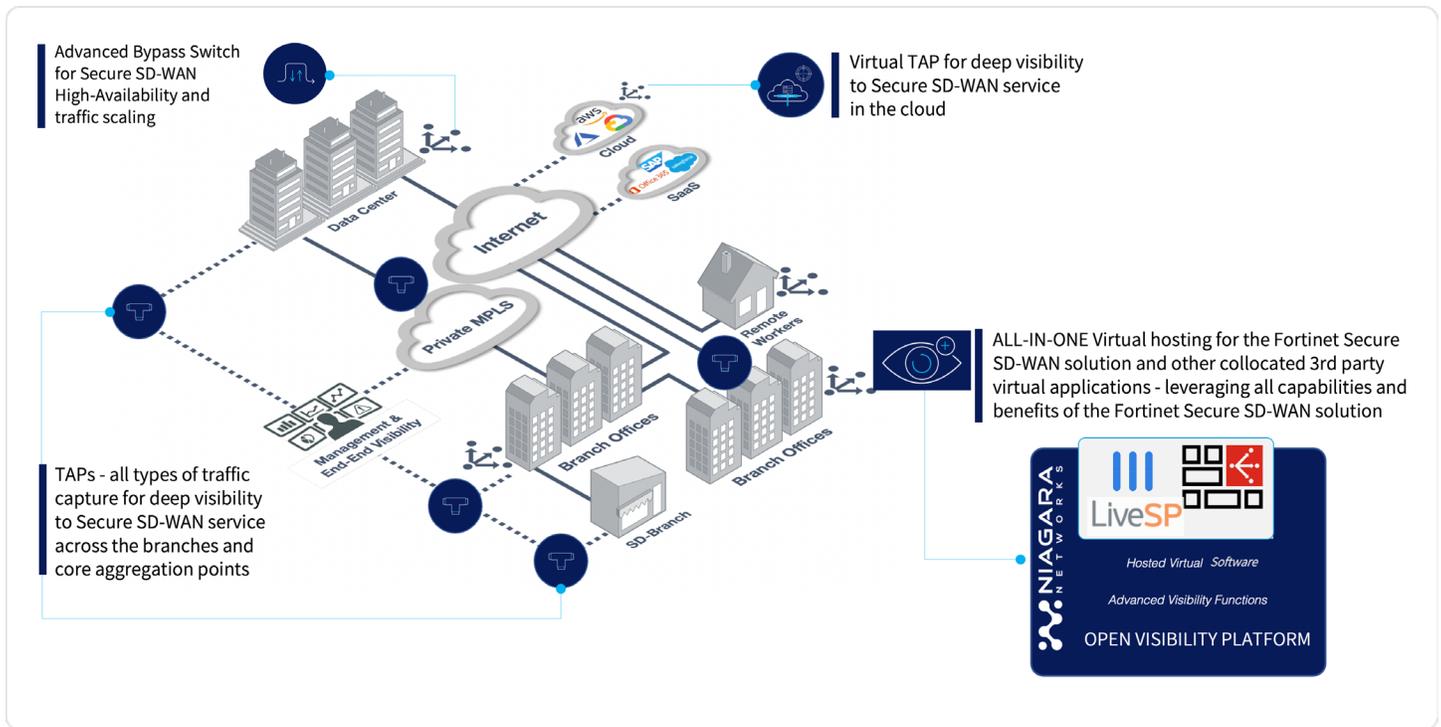
## Solution Components

- Fortinet Secure SD-WAN solution
- Niagara Networks Open Visibility solution

## Joint Solution Benefits

- Flexibility: Securely migrate traditional WAN to Fortinet Secure SD-WAN and support a variety of use cases.
- Enhanced visibility across the entire SD-WAN domain and the connected digital assets with an advanced network intelligence feeds and third-party tool integrations.
- Simplified and efficient operations: One platform for SecOps and NetOps physical and virtual network security silos and complexity.





cases. The Open Visibility solution is a unified platform with embedded functions of packet broker, bypass, active TAP, and flexible NFV-based deployment hub for cutting-edge virtual applications, giving the freedom to choose and spin up the best solution for SecOps and NetOps needs.

### Joint Secure SD-WAN Solution Benefits

- Protection of all WAN edges of the geographically distributed enterprise: Extensions of the SD-WAN with cloud-delivered security that provide flexible, secure access for a diverse and distributed workforce by eliminating any blind spots of visibility across the entire digital assets.
- Unified orchestration capabilities, complementary third-party integrations, and advanced packet brokering functions provide additional end-to-end SD-WAN visibility and control of the network and application environment.
- A world-class carrier-grade user experience: Overcome WAN impairments at all edges by using comprehensive self-healing SD-WAN across the service and cluster nodes or by a more challenging hybrid multi-vendor stack that can be homologated with Niagara's advanced bypass switching functionality.
- Reduces costs and complexity: Significantly lower operational complexity and achieve low total cost of ownership with a converged solution for NetOps and SecOps without having to compromise networking performances or security.

### Joint Solution Benefits (cont'd)

- Scalability: Easily scale Fortinet SD-WAN branches on-demand by spinning more virtual machines on Niagara's virtual hosting platform.
- Performance and redundancy: Fit seamlessly into a carrier-grade environment by improving performances in a hardware-accelerated architecture and policy-based virtual/physical bypass protection for high availability.



## Solution Use Cases

### SD-WAN edge visibility

Capture all information-in-motion, from raw packets to apps, across physical, virtual, and cloud infrastructures; process data and send it to the tools and operation teams that need it to gain complete and granular visibility of applications and infrastructure.

### Efficiency of SD-WAN mid-size branch deployments

Niagara's Open Visibility solution as a single integrated platform with Fortinet FortiGate-VM, organizations will benefit from easing network burdens, analyzing applications, and detecting and responding to threats on time.

### SD-WAN carrier-grade resiliency

Adding advanced high-availability architecture for rapid failure detection and mitigation of any SD-WAN deployment scenario, regardless of WAN interface speeds or protocols with Niagara's dual protection bypass switches and packet load sharing to Fortinet SD-WAN appliances.

## 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 is agile in responding to market trends and in meeting the customized needs of service providers, enterprises, data centers, and government agencies.



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