SOLUTION BRIEF

Fortinet Secure SD-WAN and Megaport Virtual Edge (MVE) Solution

Fast, Flexible, and Scalable WAN With Optimized and Secure Branch-to-cloud Connectivity Through Software Defined Cloud Interconnect (SDCI)

Executive Summary

Fortinet Secure SD-WAN's integration with MVE enables optimized branch-to-cloud connectivity in minutes on Megaport's private, global Network-as-a-Service (NaaS) platform. This joint solution improves network efficiency, accelerates edge to cloud and multi-cloud connectivity, reduces egress costs, and improves security with dedicated access to more than 230 global cloud on-ramps and 700+ data centers.

Challenge

Over 90% of enterprises employ multi-clouds and hybrid clouds, allowing their applications to reside anywhere—from on-campus to branch to the data center to cloud. Where these applications reside should be transparent to the end-user. This challenges organizations to interconnect applications and data across clouds, data centers, and branches to achieve this—sometimes at the expense of security and operational efficiency.

Joint Solution

Megaport and Fortinet have partnered through the Fabric-Ready Program in the Fortinet Open Fabric Ecosystem to deliver an industry-leading software-defined wide-area networking (SD-WAN) connectivity solution to address the challenges. Fortinet Secure SD-WAN provides seamless, secure, and superior quality of experience (QoE) of applications, no matter where the application is deployed. The integration of Megaport Virtual Edge and Fortinet Secure SD-WAN expands the existing Secure SD-WAN and cloud on-ramp capabilities to joint customers to deliver improved network efficiency and application optimization, a ready-to-go global network backbone in minutes, reduced cloud costs, simplified network management, and easy multi-cloud connectivity.

Fortinet Secure SD-WAN and MVE Use Cases

- **Branch to Cloud**: Extend the enterprise branch network to one or many cloud resources for one seamless network from branch to cloud.
- **Branch to Data Center**: Connect your branch locations to your data center footprint, leveraging more than 700 Megaports-enabled global data center locations.
- **VPC to VPC for Multicloud**: Neutrally and privately connect multiple cloud regions, providers, or accounts for network interoperations.
- **Branch to Branch**: Utilize Megaport’s private network to reduce reliance on the internet and connect your branch locations.

Figure 1: Superior user experience through seamless and secure connectivity with Secure SD-WAN and MVE.
Joint Solution Components

Megaport Virtual Edge (MVE)

Megaport Virtual Edge is an on-demand hosting service for network function virtualization (NFV) capabilities that allow companies to modernize branch-to-cloud connectivity and deploy SD-WAN gateways, virtual routers, and integrated transit gateways in minutes.

Fortinet Secure SD-WAN

Fortinet FortiGate delivers fast, scalable, and flexible Secure SD-WAN for cloud-first, security-sensitive, and global enterprises. Fortinet’s security-driven networking approach consolidates SD-WAN, next-generation firewall (NGFW), and advanced routing to deliver superior quality of experience at any scale.

Solutions Integration

Fortinet Secure SD-WAN creates the private overlay network and manages the network connections and network policies. The Megaport Portal is used to create and order the Megaport Virtual Edge, and create and manage the virtual cross connects (VXCs) to the cloud on-ramps and other services in the Megaport Software Defined Network (SDN).

Fortinet Secure SD-WAN customers can host localized versions of FortiGate VMs on MVE devices and reduce the distance their data traverses over internet paths from branch locations to public or private clouds or between branch locations. The Fortinet Secure SD-WAN fabric acts as the overlay, and the Megaport SDN acts as the underlay.

Figure 2: Optimized and secure branch-to-cloud connectivity with Secure SD-WAN and MVE.
Customer Use Cases

1. Improved Multi-cloud Connectivity
   A Fortune 500 company with over 1,100 branches deployed Megaport Virtual Edge with Fortinet Secure SD-WAN for improved multi-cloud connectivity to applications in AWS and Microsoft Azure. Branches were previously connecting to private infrastructure hosted in Las Vegas and Reno and then to Microsoft cloud regions.

2. Enterprise Connects Seven Branches to Cloud
   A small enterprise connected seven branch offices to a single public cloud with Megaport Virtual Edge to improve branch-to-cloud connectivity.

Summary
The ability of SD-WAN solutions to accelerate the delivery of cloud-based resources across multi-cloud environments plays a critical role in fulfilling this promise of an optimal user experience. The adoption of Fortinet Secure SD-WAN with Megaport's global Software Defined Network enables customers to optimize their SD-WAN connectivity and improve overall network and application performance at the fraction of the cost of traditional connectivity methods. Customers can host virtual instances of Fortinet SD-WAN orchestrators around the world on Megaport's platform to improve the edge network connectivity of their organizations.

About Megaport
Megaport is a leading provider of Network as a Service (NaaS) solutions. The company's global Software Defined Network (SDN) helps businesses rapidly connect their network to services via an easy-to-use portal or our open API. Megaport offers agile networking capabilities that reduce operating costs and increase speed to market compared to traditional networking solutions. Megaport partners with the world's top cloud service providers, including AWS, Microsoft Azure, and Google Cloud, as well as the largest data center operators, systems integrators, and managed service providers in the world. Megaport is an ISO/IEC 27001-certified company.