

VM-Series and Megaport Virtual Edge

Improve Network Security by Deploying High-Performance Virtual Firewalls Quickly and Easily

Benefits of the Integration

- **Fast deployment:** Virtually provision Palo Alto Networks VM-Series virtual firewalls in just a few minutes.
- **Easy to configure and manage:** Deploy an integrated end-to-end network security solution.
- **Multicloud reach:** Establish secure, multicloud connections to over 360 service providers and over 280 cloud on-ramps.
- **ROI value:** Reduce cost on cloud egress fees from leading cloud providers, and less cost over traditional connectivity methods.

The Challenge

With 89% of enterprises using multicloud and/or hybrid cloud environments,¹ data from business-critical applications can reside anywhere: at the branch office, inside a remote worker's home, within the data center, or in the cloud. This creates complex security challenges for today's IT departments. An increasing number of threat actors, combined with a distributed attack surface of network endpoints makes the goal of securing the network harder to achieve than ever.

Deploying firewalls in each public cloud often requires manual configuration and involves a lack of interoperability and visibility between cloud environments. Connecting hybrid cloud networking over internet-based transit adds complexity and risk to security, resilience, and performance. Inflexible firewall capacity and lack of control over middle-mile transport can adversely impact users. It's important to be able to deploy next-generation firewalls quickly, simply, and securely at your network edge, as close to your users as possible.

The Solution

A flexible extension of your network security fabric, on-demand network function virtualization (NFV) services improve your security posture by enabling your organization to build next-generation firewalls near any network endpoint

in just minutes. Whether it's public or private clouds, remote sites, or head offices, NFV services are enhanced with Palo Alto Networks best-in-class firewalls with private connectivity to a secure global network, allowing you to deploy firewalls anytime, anywhere.

Megaport Virtual Edge

Megaport Virtual Edge (MVE) is an on-demand, vendor-neutral NFV service that provides virtual infrastructure for network services at the edge of Megaport's global software-defined network (SDN). Network technologies such as SD-WAN gateways and virtual firewalls are hosted directly on Megaport's global network via Megaport Virtual Edge.

MVE modernizes network connectivity and enables customers to deploy virtual firewalls, SD-WAN gateways, virtual routers, and integrated transit gateways in minutes. Users of MVE can seamlessly extend their network services closer to the end user without the need for hardware. MVE improves the performance of these virtual network devices by connecting them to Megaport's global private network, providing secure, dedicated, and highly reliable connectivity to branches, remote sites, public clouds, private clouds, and other mission-critical digital infrastructure.

Palo Alto Networks VM-Series Firewall

The Palo Alto Networks VM-Series Virtual Next-Generation Firewall consistently protects public and private clouds, virtualized data centers, and branch environments by delivering inline network security and threat prevention. Public cloud platforms and software-defined network solutions lack the threat prevention capabilities needed to keep your environment safe. VM-Series virtual firewalls augment your security posture with the industry-leading advanced threat prevention capabilities of the Palo Alto Networks Next-Generation Firewall (NGFW) in a VM form factor, making it automatable, scalable, and easily deployed.

1. 2022 State of the Cloud Report, Flexera, March 9, 2022.

Palo Alto Networks and Megaport

Palo Alto Networks network security platform helps security leaders and practitioners stay ahead of the most complex cybersecurity threats. Megaport's network connectivity solutions ensure virtual instances of Palo Alto Networks VM-Series virtual firewalls are highly performant by connecting them to Megaport's private global software-defined network.

Companies can create a Megaport Virtual Edge, an on-demand, vendor-neutral NFV service in minutes on the Megaport Portal, and host virtual instances of Palo Alto Networks VM-Series virtual firewalls on the MVE, which can be managed within Panorama, Palo Alto Networks firewall management console. IT departments can use virtual firewalls to inspect inbound and outbound traffic closer to where applications reside. Customers may also configure high availability (HA) services on their VM-Series virtual firewalls deployed in MVE diversity zones for optimal resiliency.

Deploying Palo Alto Networks VM-Series virtual firewalls on MVE helps companies maximize their security posture, protecting applications/critical data, and reducing cloud costs while improving user experience.

Use Case 1: Securing Hybrid Multicloud Networks for Optimal Application Performance

Challenge

Securing application traffic between multiple clouds across multiple regions increases network complexity and creates suboptimal application performance. Many security teams bring traffic back to a primary data center to inspect inbound and outbound traffic. This hybrid cloud network design can create greater latency and expose traffic to the internet, allowing for greater distances and greater security gaps and threats.

Solution

By deploying instances of Palo Alto Networks VM-Series virtual firewalls into Megaport Virtual Edge, security departments can deploy protection closer to both users and their applications, eliminating the need to backhaul traffic to a primary data center for threat inspection.

Security teams can inspect traffic closer to the network's edge, lowering latency, improving application protections, and taking traffic off the public internet and onto a private, secured network. This solution also mitigates the risk of planned or unplanned downtime at the data center by routing cloud-destined traffic directly to the cloud service provider(s).

Use Case 2: Securing Cloud-to-Cloud Traffic

Challenge

Cloud-to-cloud traffic inspection can be challenging. Fire-

wall deployments within public clouds can require manual configurations and lack interoperability between different cloud vendors. Disparate cloud architectures can result in visibility gaps and inconsistent security policies across hybrid/multicloud environments.

Solution

By hosting Palo Alto Networks VM-Series virtual firewalls on Megaport Virtual Edge, security teams can aggregate and inspect traffic from multiple cloud providers and applications using scalable virtual firewalls. This creates a more efficient, simplified network design that enhances an organization's security posture and optimizes application protection.

Megaport Virtual Edge connects directly and privately via Virtual Cross Connects to each cloud provider, ensuring traffic is taken off the insecure public internet for inspection through the Palo Alto Networks VM-Series virtual firewall.

Figure 1: Megaport Virtual Edge Hybrid Network with Palo Alto Networks VM-Series virtual firewalls

About Megaport

Since 2013, Megaport has been changing how businesses connect their infrastructure with smart, simple, and accessible connectivity solutions. Customers can build secure, scalable, and affordable networks in just a few clicks, accessing global endpoints and creating private paths in minutes. Trusted by the world's top companies, Megaport partners with global leading service providers, data center operators, systems integrators, and managed services companies, and operates in six continents across more than 800 enabled locations. Join the network revolution at megaport.com.

About Palo Alto Networks

Palo Alto Networks is the world's cybersecurity leader. Our next-gen security solutions, expert services, and industry-leading threat intelligence empower organizations across every sector to transform with confidence. For more information, visit www.paloaltonetworks.com.



3000 Tannery Way
Santa Clara, CA 95054
Main: +1.408.753.4000
Sales: +1.866.320.4788
Support: +1.866.898.9087
www.paloaltonetworks.com

© 2023 Palo Alto Networks, Inc. A list of our trademarks in the United States and other jurisdictions can be found at <https://www.paloaltonetworks.com/company/trademarks.html>. All other marks mentioned herein may be trademarks of their respective companies.

parent_pb_megaport-virtual-edge_112823