

Fortinet and Enea Secure SD-WAN NFV Solution

Automated, scalable, and secure SD-WAN with SDN/NFV Management and Orchestration for white box uCPE

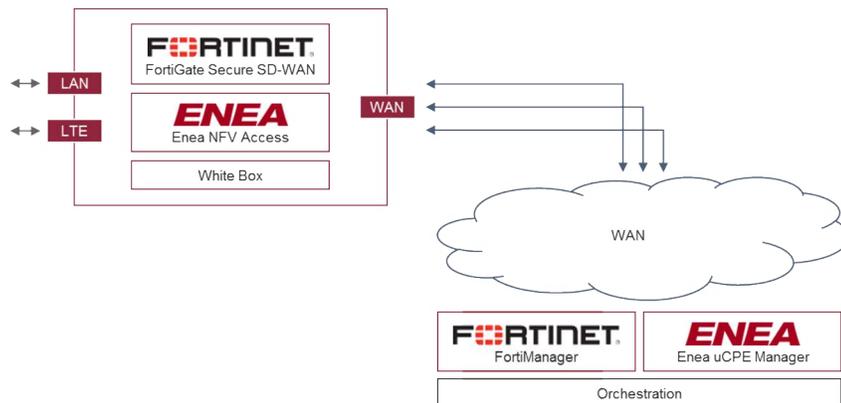
Secure SD-WAN brings the flexibility and cost-efficiency that enterprises are looking for in their digital transformation. Built on white box uCPEs running edge native VNFs, this new approach is the foundation of a cloud-friendly and agile enterprise network with the potential to accommodate new use cases and growing data traffic.

Increasing cyber-threats require high-performance and flexible security solutions for SD-WAN. Security is a major consideration when migrating network infrastructure to SDN/NFV, and it needs to be a fundamental part of any SD-WAN implementation, protecting all parts of an enterprise network against malicious attacks and security breaches.

Service providers and enterprises need cost-efficient, scalable, and secure SD-WAN solutions that also provide a good user experience. They want flexibility to choose white box hardware to keep costs down, they need powerful automation and tools to simplify NFV management and orchestration, and reduce the time to deploy or update services.

Joint Solution Description

The solution integrates the FortiGate SD-WAN VNF with Enea NFV Access and Enea uCPE Manager. This flexible and cost-effective solution is pre-verified and commercially deployable on any white box device scaling from cost-sensitive entry-level to high-performance devices.



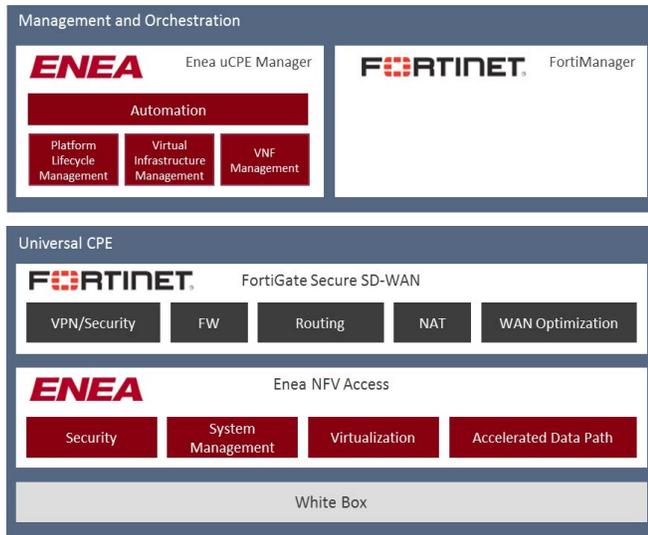
Joint Solution Benefits

- Cost-efficient secure and virtualized SD-WAN for any white box hardware.
- Leveraging the power of FortiGate Next Generation Firewall for secure SD-WAN.
- Flexible and adaptable to different use cases and performance requirements scaling from cost-sensitive tabletop CPE to high-end server deployments.
- Powerful automation and secure Zero Touch Provisioning (ZTP) make large networks and services easy and quick to deploy and manage.

Enea NFV Access provides the virtualization layer in the uCPE, enabling FortiGate to run as a VNF. Enea uCPE manager provides centralized management tools including automation, ZTP, VNF lifecycle management, FCAPS, and service chaining.

Enea NFV Access and Enea uCPE Manager use the industry standard NETCONF protocol for the management interface. Enea NFV Access keeps complexity and solution footprint to a minimum. This allows the Enea-FortiGate solution to be deployed on any x86 white box uCPE, from slim entry-level devices with as little as 2 cores and 2 GB of RAM, up to high-end devices for high traffic volumes and use cases where FortiGate is chained with other VNFs in multiple configurations.

Diagram of Joint Solution



Joint Solution Components

Enea NFV Access

Enea NFV Access is a complete NFVI platform designed for deployment on white box uCPEs at the customer premise, and optimized for common vCPE and SD-WAN use cases. Not based on OpenStack, it is able to provide full throughput and performance with minimal footprint. It depends on as little as one core and scales to high-end Intel Xeon devices, leading to high deployment flexibility.

Enea uCPE Manager is a VIM and VNF Manager included with Enea NFV Access. It simplifies deployment and management through automation and a feature set that includes zero touch provisioning, simple VNF onboarding, service function chaining, VNF lifecycle management and platform lifecycle management providing full FCAPS.

Enea uCPE Manager can be deployed as a VNF in the cloud to enable uCPE management and orchestration as a service, and it integrates with any orchestrator.

FortiGate Secure SDWAN

The Fortinet FortiGate network security platform provides high performance, layered security services and granular visibility for end to end protection across the entire enterprise network. Innovative Virtual security processor (vSPU) technology delivers high-performance application layer security services (NGFW, SSL inspection, and threat protection), coupled with a fast SSL inspection engine to help protect against malware hiding in SSL/TLS encrypted traffic. FortiGate SD-WAN replaces separate WAN routers, WAN optimization, and security devices with a single solution that is application-aware, offers automatic WAN path control and multi-broadband support. It improves application performance, reduces WAN Operating expenses and minimizes management complexity. The platform also leverages global threat intelligence to protect individual customers, by using Fortinet's FortiGuard Security Subscription Services to enable visibility and control for next-generation protection against advanced threats, including zero-day attacks.

About Enea

Enea develops the software foundation for the connected society. We provide solutions for mobile network traffic management, network virtualization, network traffic classification, embedded operating systems, and professional services. Solution vendors, systems integrators, and service providers rely on Enea when creating new world leading networking products and services. More than 3 billion people around the globe already depend on Enea technologies in their daily lives.

Learn more at www.enea.com