Fortinet and Amdocs Security Solution

Automation and Zero-Touch Provisioning of Fortinet NFV Security Services with Amdocs NFV Powered by ONAP for Increased Agility and Operational Efficiency

In today's competitive environment, service providers are driven to continually enhance service offerings to address customer needs. The ability of service providers to offer compelling services in a timely manner and at an effective price point is their key to competitive success. Customers demand new and innovative services that can be quickly procured, deployed and modified.

However, proprietary appliances from numerous vendors create barriers to rapid deployment of new services. Adding to that are challenges arising from increasingly complex networks housing and transporting vast amounts of data. All of this drives up cost and is often difficult to maintain, leaving service providers with a daunting challenge to maintain their competitive positioning. To counter these challenges, service providers are driving a shift to Network Functions Virtualization (NFV) to rapidly introduce new services with improved security and flexibility, respond quickly to customer needs, and deploy their offerings anywhere in the world through virtualization.

Orchestration platforms that automate rapid service provisioning and deployment through software-driven capabilities enable Communications Service Providers (CSPs) to keep pace with their customers' digital transformation journey by accelerating performance across the enterprise data network, and offer increasing agility with improved operational efficiency.

Joint Solution Description

The Fortinet and Amdocs integrated solution addresses the above challenges, by leveraging and integrating the Amdocs NFV powered by ONAP (Open Network Automation Platform) and the Fortinet Security Fabric. Amdocs NFV powered by ONAP provides Orchestration of service orders decomposition and fulfillment flows including the full VNF lifecycle workflow.

It integrates with the BSS/OSS and serves as the glue between IT and networking domains enables service providers to quickly add services, features and capabilities, and increases network utilization, efficiency, and automation. At the same time, it streamlines network operations and reduces total cost of ownership.

The Fortinet Security Fabric's integrated, collaborative and adaptive architecture delivers security without compromise to address the most critical security challenges, whether in networked, application, cloud or mobile environments. The Fortinet Security Fabric is designed around a series of open APIs, Open Authentication Technology, and standardized telemetry data to enable organizations to integrate existing security technologies via open interfaces and provide end-to-end security without compromise.

Fortinet Security Fabric and the award-winning Fortinet FortiGate network security virtual function components have been onboarded and pre-integrated with Amdocs NFV powered by ONAP allowing service providers to augment or replace their existing network with software-enabled alternatives that offer scalable bandwidth, reliability and flexibility with enhanced security.

Joint Solution Benefits

- **Agility:** The joint solution enables service providers to rapidly roll out new and innovative NFV service offerings to market, via automated service provisioning hand deployment capabilities.

- **Unparalleled security protection:** The solution leverages the industry's best-validated security protection offered by Fortinet's FortiGate network security platform to protect against sophisticated cyberthreats.

- **Scalability:** Automation and simplification of the NFV delivery process supports growth in volume and complexity of business orders.

- **Efficiency:** Automation delivers significant reduction in the end-to-end process, reducing both costs and time to market.

- **Flexibility:** Amdocs' multi domain, multi-vendor orchestration platform allows customers to deploy VNFs for security from Fortinet at the customer premises, the data center or in the public cloud, as required by the customer.

- **Future Readiness:** Amdocs NFV orchestration platform supports new virtual services for all tiers of business without the need for manual effort to integrate with the previous NFV use cases.

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Fabric-Ready

Amdocs multi domain orchestration allows customers to decouple their network functions from the hardware appliance and deploy the broad portfolio of Fortinet security virtual functions at customer premises, data centers or public cloud as required by the customer and can scale at ease based on demand.

The Fortinet and Amdocs partnership enables service providers to progress in their journey towards offering innovative virtual services to all tiers of business customers. Amdocs' platform enhances fulfillment and agility through orchestration, and automation capabilities, and helps integrate existing business and operations support systems, as well as virtualized security service functions from Fortinet.

Joint Benefits include:

- Increase operational efficiency due to automated service orchestration.

- Accelerate innovation and service agility through ease of VNF onboarding and service chaining.

- Increase flexibility and profitability of managed services through service automation and orchestration, zero-touch provisioning, centralized management and multi-tenant software running on commodity hardware.

- Greater business agility and responsiveness for business customers needs.

- Affordable, scalable, pre-integrated, tested and ONAP compatible platform – reduces deployment time and time to market.
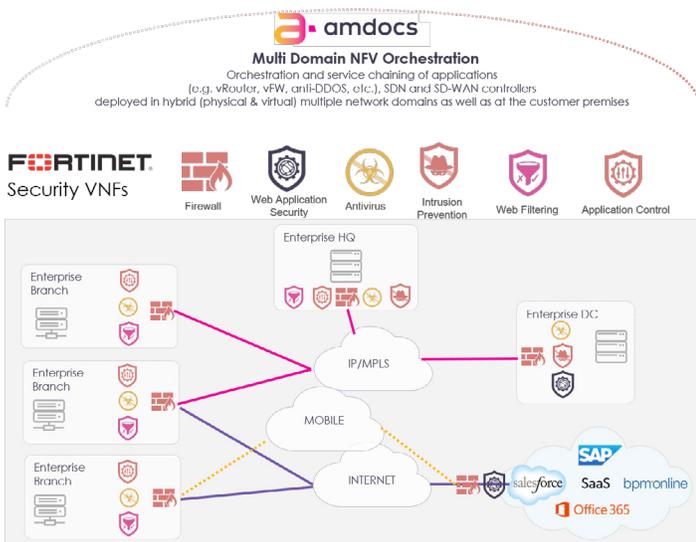
Diagram of Joint Solution

Figure 1: Fortinet broad portfolio of security VNFs deployed and managed by Amdocs NFV powered by ONAP at customer premises, data centers or public cloud

Use Case

A leading North American media and communications service provider have selected Fortinet and Amdocs to successfully introduce SDN/NFV based services for business and enterprise customer enabling both greater scale and increased cost efficiencies.

Amdocs' multi-domain, multi-vendor orchestration platform is used to deploy Fortinet security and other VNFs at the customer premises, the data center or on the public cloud, as required by business customers. Amdocs' NFV Orchestration instantiation, activation and full life cycle management of VNFs simplify delivery process supports service innovation and growth.

Components of the Joint Solution

Amdocs NFV Orchestration Platform

Amdocs NFV powered by ONAP is a productized version of key ONAP modules coupled with additional tools and capabilities. Amdocs NFV powered by ONAP features three main modules:

- Service design and creation module that allows for service development and creation and the design of policies for operating the network.

- NFV Orchestration module: once the service is designed, the orchestrator is used to place VNFs in the right servers in the network. The orchestration module features an SDN controller for managing the flow of traffic on the network. The module also features an application control element that manages the full lifecycle of the VNF.

- Operation module: provides inventory updates to the orchestrator module so it knows where the VNF inventory is located and which servers have capacity.

Amdocs NFV powered by ONAP is complemented by a portfolio of professional services to fast-track NFV strategic planning, implementation, and operations/assurance, as well as integration to existing operational and business support systems, which is essential to commercializing virtual network services.

Fortinet FortiGate Virtual Next-Generation Firewall

Fortinet delivers the industry's best threat protection, unified threat management and performance in a virtualized form factor, based on the award-winning FortiGate network security platform. FortiGate-VM offers the highest performance and scalability of any virtual firewall available today, with a comprehensive set of validated security capabilities including application control, intrusion prevention, antivirus, web filtering, mobile security, sandbox, SD-WAN, CASB, security rating service and industrial control services.

About Amdocs

Amdocs is a leading software and services provider to communications and media companies of all sizes, accelerating the industry's dynamic and continuous digital transformation. With a rich set of innovative solutions, long-term business relationships with 350 communications and media providers, and technology and distribution ties to 600 content creators, Amdocs delivers business improvements to drive growth. Amdocs and its 25,000 employees serve customers in over 85 countries. Listed on the NASDAQ Global Select Market, Amdocs had revenue of $4.0 billion in fiscal 2018.

For more information, visit Amdocs at www.amdocs.com

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