

# Fortinet and Nutanix Network Security Solution

## Securing Virtual Networks with Nutanix Flow and FortiGate-VM

### The Challenge

With increasing application complexity, driven by distributed services and rapid growth in SaaS and cloud-based offerings, the need to easily visualize, analyze and secure network communications becomes critical.

### The Joint Solution

Fortinet and Nutanix form a software-defined solution with secure, scalable, hyperconverged infrastructure for virtualized applications. The FortiGate-VM running on Nutanix AHV provides deeper visibility into applications and prevents known and unknown threats, while Nutanix enables you to meet the growing demands of enterprise applications, hybrid-cloud, and the fast pace of modern business.

FortiGate-VM enables data center traffic to be segmented based on the application and then inspected for known and unknown cyber-threats. Policy based redirection from Flow™ gives admins granular control over traffic inspection and optimizes resource consumption. Automation features and centralized management enable you to ensure that security policies can keep pace with any contextual changes in your enterprise cloud environment.

Nutanix and Fortinet have validated two modes for deployment flexibility. Choose layer 3 routed mode for FortiGate-VM on Nutanix AHV to inspect traffic while acting as a layer 3 gateway. Use layer 2 vWire mode as part of Nutanix Flow traffic redirection to transparently direct VM traffic through a FortiGate-VM firewall running on every AHV host.

- L7/ DPI / Advanced Security with FortiGate-VM
- Cluster wide deployment of service chains with Nutanix Calm
- Multiple Services Per Chain
- Policy Based Selective Traffic Redirection

### Joint Solution Benefits

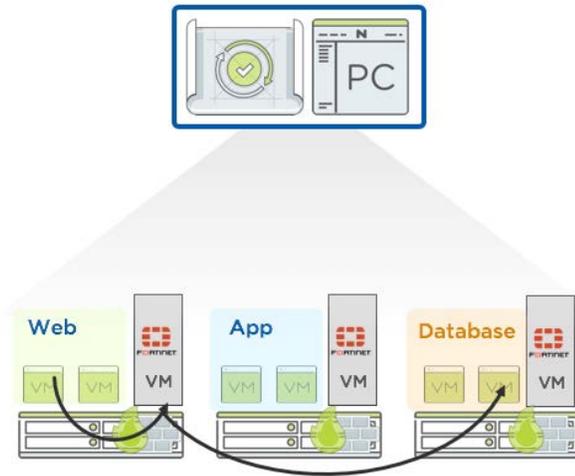
- Segment and control East-West VM traffic
- Advanced L7 security protection and automated remediation
- Add policy based Deep Packet Inspection (DPI) between VMs
- Identify and control traffic flowing into your secure environment; limit application access based on users and groups; block known and unknown threats
- Securely deploy applications faster and scale at the pace of modern business
- Predictable scale-out architecture to seamlessly expand desktop and server virtualization pilots to full production deployment

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## Diagram of Joint Solution



Service Chaining Nutanix Deployments with Nutanix Flow™ and FortiGate-VM

FortiGate-VM is a virtualized form factor of our market leading, high performance FortiGate next-generation firewall that delivers advanced security protection for north-south and east-west traffic in software-defined data centers and cloud. Based on the powerful FortiOS operating system and FortiGuard Threat Intelligence services, FortiGate virtual NGFW delivers industry-leading performance and layered threat protection of your software defined data center traffic, with a single pane-of-glass to manage your physical and virtual network.

## Nutanix Flow Networking

Flow™ is a software defined network policy engine built into AHV virtualization, with nothing to install and no requirements to alter or reconfigure your physical networking. Flow™ provides VM level application microsegmentation, virtual network segmentation, and policy-based network service insertion. Flow makes it easy to visualize and discover VM communications and create policy for all virtualized network traffic.

Using service insertion, Flow enables policy based VM traffic redirection through FortiGate-VM firewalls, expanding visibility and control.

## Solution Components

### Fortinet Security Fabric

The Security Fabric allows security to dynamically expand and adapt as more and more workloads and data are added. Security seamlessly follows and protects data, users, and applications as they move between IoT, devices, and cloud environments throughout the network.

FortiGates are the foundation of Security Fabric, expanding security via visibility and control by tightly integrating with other Fortinet security products and Fabric-Ready Partner solutions.

### Fortinet FortiGate-VM Next Generation Firewall (NGFW)

Your virtualized data center assets need advanced protection from evolving threats, both known and unknown.

## About Nutanix

Nutanix, the leader in hypervconverged infrastructure (HCI), makes datacenter infrastructure and clouds invisible, elevating IT to focus on business applications and services. Its Enterprise Cloud OS software converges private, public and distributed clouds, bringing one-click simplicity and agility to infrastructure and application management. This enables IT to rapidly deliver against business needs at a favorable TCO, while retaining hardware and virtualization technology that best suit their skills.

Learn more at [www.nutanix.com](http://www.nutanix.com)

