DATA SHEET

FortiGate®-VMX
Extensible Security Controls
for VMware Environments

FortiGate-VMX

FortiGate-VMX is a specific security solution for VMware environments that provides purpose-built integration for VMware's Software-Defined Data Center (SDDC) — encompassing interoperability with VMware NSX and vSphere. Through direct API-integration, FortiGate-VMX has visibility into and can secure virtualized network traffic at the hypervisor level. Automated deployment and management orchestration are used to secure workloads in dynamic software-defined networks and infrastructure to enable protection and close compliance gaps.

Proven Success in Virtual Environments

Fortinet introduced Virtual Domain (VDOM) technology in 2004. Since that time, we have offered virtualized security solutions to service providers and enterprises alike. With the initial release of the FortiGate-VM virtual appliance form factor in 2010, Fortinet paved a path of greater choice and flexibility to customers by providing the ability to deploy our security solutions within existing virtualized and Cloud infrastructure.

Growing from that first successful launch, Fortinet now offers 11+ virtualized security solutions for VMware environments — FortiGate-VMX spearheading that portfolio.

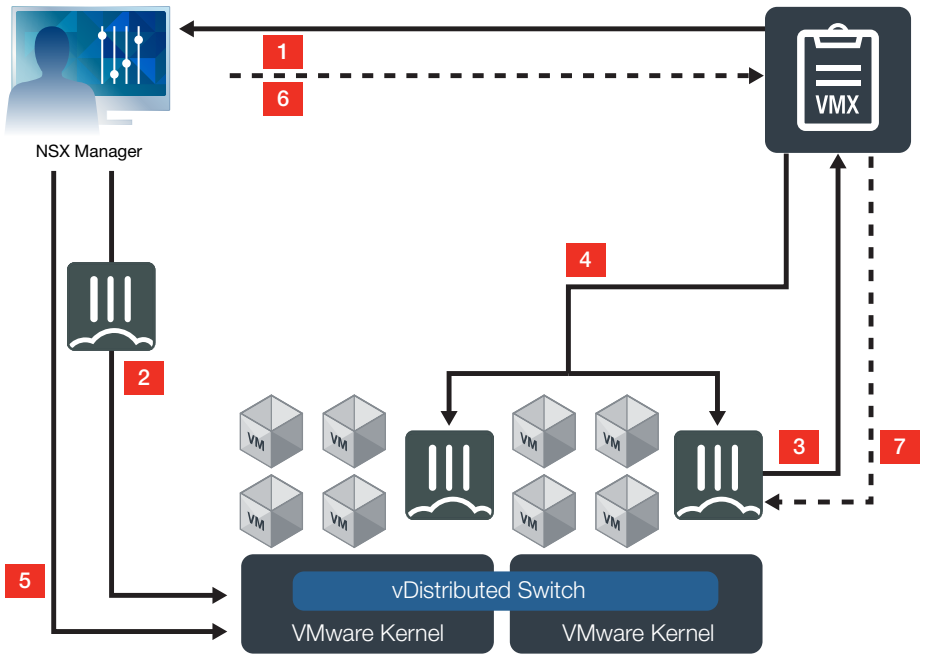
Fortinet comprehensive virtual appliance offerings

Growing from that first successful launch, Fortinet now offers 11+ virtualized security solutions for VMware environments — FortiGate-VMX spearheading that portfolio.

Highlights

- Visibility into all vSphere virtual network traffic
- Automated deployment and provisioning of FortiGate-VMX security nodes to new ESXi hosts
- Instant-on real-time protection of new VM workloads
- Session-state retained across live migration events (vMotion)
- Support for multi-tenant environments
- Full Next Generation security functionality solution in one platform

DEPLOYMENT

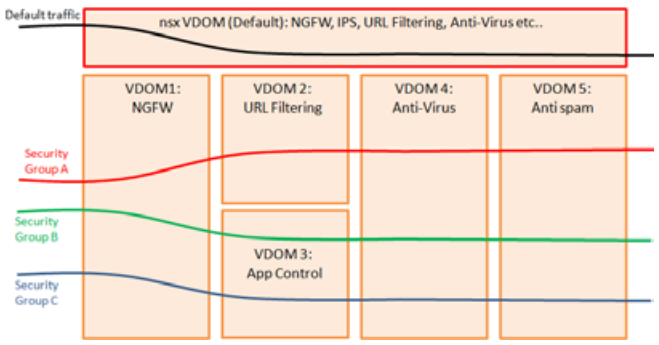


1. Register FortiGate-VMX security service with NSX Manager
2. Auto-deploy FortiGate-VMX to all hosts in security cluster
3. FortiGate-VMX connects with FortiGate-VMX Service Manager
4. License verification and configuration synchronization with FortiGate-VMX
5. Redirection policy rules updated in NSX
6. Real-time updates of object database
7. Push policy synchronization to all FortiGate-VMX deployed in cluster

1. **Register FortiGate-VMX as a security service**
   The registration process uses the NetX (Network Extensible) management plane API to enable bidirectional communication between the FortiGate-VMX Service Manager and NSX Manager.
2. **Auto-deploy of FortiGate-VMX to all ESXi hosts in the cluster**
   The NSX Manager collects the FortiGate-VMX image from the URL specified during registration and installs an instance of FortiGate-VMX on each ESXi host in the cluster.
3. **Connection is established between FortiGate-VMX and the FortiGate-VMX Service Manager**
   FortiGate-VMX initiates a connection to the FortiGate-VMX Service Manager to obtain license information.
4. **Configuration synchronization of FortiGate-VMX**
   The FortiGate-VMX Service Manager verifies FortiGate-VMX status and synchronizes the configuration.
5. **Re-direction rules enabled**
   NSX Network Introspection Service Security Policy rules are enabled to redirect all designated communication flows to FortiGate-VMX for securing of traffic.
6. **Real-time updates of objects**
   NSX Manager sends real-time updates on changes in the virtual environment to the FortiGate-VMX Service Manager.
7. **Policy synchronization to all FortiGate-VMX instances deployed in the ESXi cluster**
   Newly created security policies are pushed to all FortiGate-VMX security nodes. Every FortiGate-VMX deployed in the cluster will have the same set of policies.

Virtual Segmentation Function

Extending Fortinet's Virtual Domain technology into FortiGate-VMX allows for segmentation of security functions and enablement of multi-tenancy. Mapping NSX Service Profiles to Fortinet VDOMs segregates policies to be enforced for specific traffic flows. This model reduces the added complexity of registering a specific security solution for each tenant hosted in the environment.



SOFTWARE

FortiOS Managment UI — FortiView and Application Control Panel

FortiOS

FortiOS helps you protect your organization against advanced threats, configure and deploy your network security faster and see deep into what's happening inside your network. It enables organization to set up policies specific to types of devices, users and applications with industry-leading security capabilities. The feature set is consistent for both virtual and physical appliance and can be managed on a single centralized platform. In essence, FortiOS delivers:

- **Comprehensive Security** — Control thousands of applications and stop more threats with NSS Labs Recommended IPS, sandboxing, VB100 certified antimalware and more.
- **Superior Control and Visibility** — Stay in control with rich visibility over network traffic, granular policy control, and intuitive, scalable security and network management.
- **Robust Networking Capabilities** — Optimize your network with extensive switching and routing, high availability, WAN optimization, embedded WiFi controller, and a range of virtual options.

For more information, please refer to the FortiOS data sheet available at www.fortinet.com

SERVICES

FortiGuard™ Security Services

FortiGuard Labs offers real-time intelligence on the threat landscape, delivering comprehensive security updates across the full range of Fortinet's solutions. Comprised of security threat researchers, engineers, and forensic specialists, the team collaborates with the world's leading threat monitoring organizations, other network and security vendors, as well as law enforcement agencies:

- **Real-time Updates** — 24x7x365 Global Operations research security intelligence, distributed via Fortinet Distributed Network to all Fortinet platforms.
- **Security Research** — FortiGuard Labs have discovered over 170 unique zero-day vulnerabilities to date, totaling millions of automated signature updates monthly.
- **Validated Security Intelligence** — Based on FortiGuard intelligence, Fortinet's network security platform is tested and validated by the world's leading third-party testing labs and customers globally.

For more information, please refer to http://forti.net/guard

FortiCare™ Support Services

Our FortiCare customer support team provides global technical support for all Fortinet products. With support staff in the Americas, Europe, Middle East and Asia, FortiCare offers services to meet the needs of enterprises of all sizes:

- **Enhanced Support** — For customers who need support during local business hours only.
- **Comprehensive Support** — For customers who need around-the-clock mission critical support, including advanced exchange hardware replacement.
- **Premium Services** — For global or regional customers who need an assigned Technical Account Manager, enhanced service level agreements, extended software support, priority escalation, on-site visits and more.
- **Professional Services** — For customers with more complex security implementations that require architecture and design services, implementation and deployment services, operational services and more.

For more information, please refer to http://forti.net/care

SOLUTION

Visibility

Unlike traditional deployments where the security virtual appliance is required to be in the flow of traffic to enforce policy, FortiGate-VMX can see traffic as it traverses between the virtual switch port and the virtual NIC (vNIC) of the workload VM itself.

Automated Deployment and Provisioning

FortiGate-VMX Service Manage talks directly with VMware's NSX Manager to communicate information about and register the Fortinet security service. The VMware environment then automates the deployment of FortiGate-VMX Security Nodes to each VMware ESXi host in the designated cluster. Licensing and security policy is also automated between the FortiGate-VMX Service Manager and the FortiGate-VMX Security Nodes.

Object-based protection

FortiGate-VMX security policy is based on dynamic NSX Security Groups and their associated objects. Any additions or other changes to these Security Groups in the NSX Manager will be automatically associated with the proper FortiGate-VMX security policy without requiring any manual changes in the FortiGate-VMX Service Manager. Policies are enforced independent of broadcast domain or port connection. Policy will also follow the workload VM from host to host during live migration (vMotion) events.

Policy redirection

Through integration with VMware NSX APIs and NSX Service Composer, custom redirection security policies enable application traffic flow to/from specific VM workload within the designated ESXi cluster(s) to be secured by the FortiGate-VMX security service. No manual configuration of network flows are required.

Real-time protection

With policies based on NSX dynamic Security Groups, new VM workloads are automatically associated to their proper security policy in real-time upon creation. No more lag-time between creation and enforcement or mistakes commonly associated with communication between data center administrators and security administrators.

Cluster-based scaling

Because FortiGate-VMX is a security service within the VMware environment, any new hosts added to the secure ESXi cluster will immediately fall under the same security policy. FortiGate-VMX security nodes will automatically deploy to those new ESXi hosts without any manual intervention.

Summary

Using the advanced FortiOS™ operating system, FortiGate appliances effectively neutralize a wide range of security threats facing your software defined datacenter (SDDC). Whether deployed at the edge as a front-line defense (FortiGate hardware appliances), within the virtual infrastructure for inter-zone security and VPN termination at the application (FortiGate-VM) or utilized for inter-VM and advanced hypervisor-based security (FortiGate-VMX), FortiGate appliances protect your infrastructure with some of the most effective security available today.

SPECIFICATIONS

	SOLUTION	VERSION SUPPORT
Fortinet		
	FortiGate-VMX Service Manager	v1.0 (vCNS deployments) v5.4 (NSX deployments)
	FortiGate-VMX Security Node	FortiOS v5.2.4 (vCNS deployments) FortiOS v5.4 (NSX deployments)
	FortiAnalyzer (Optional)	v5.2.4
VMware		
	vCenter Server	v5.5 Update 2 (for vCNS deployments) v5.5 Update 2, v6.0 (for NSX deployments)
	ESXi	v5.5 Update 2 (for vCNS deployments) v5.5 Update 2, v6.0 (for NSX deployments)
	NSX	v6.1.3, v6.1.4
	vCloud Networking & Security	v5.5.2.1 or later

ORDER INFORMATION

Product	SKU	Description
FortiGate-VMX Service Manager	FG-VMX-MGMT	FortiGate-VMX Service Manager for VMware vCNS and NSX environments.
FortiGate-VMX Security Node	FG-VMX-1	One (1) FortiGate-VMX instance for VMware vCNS & NSX environments.

GLOBAL HEADQUARTERS
Fortinet Inc.
899 Kifer Road
Sunnyvale, CA 94086
United States
Tel: +1.408.235.7700
www.fortinet.com/sales

EMEA SALES OFFICE
120 rue Albert Caquot
06560, Sophia Antipolis,
France
Tel: +33.4.8987.0510

APAC SALES OFFICE
300 Beach Road 20-01
The Concourse
Singapore 199555
Tel: +65.6513.3730

LATIN AMERICA SALES OFFICE
Prol. Paseo de la Reforma 115 Int. 702
Col. Lomas de Santa Fe,
C.P. 01219
Del. Alvaro Obregón
México D.F.
Tel: 011-52-(55) 5524-8480