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SOLUTION BRIEF

NEXT GENERATION FIREWALL SOLUTION

Fortinet's leading NGFW solution delivers unparalleled protection, ease of use and ultra-fast performance to secure your organization against today's advanced threats.

Upgrade Your Network Security with a Next-Generation Firewall

Stolen data fuels a highly profitable cybercrime economy and organizations are constantly under attack. The risk of data breach drives the need to add more security and the need to increase visibility into and control over network traffic, especially at the network perimeter or between network segments within an organization.

Traditional firewalls and standalone point security products may help but they can also add gaps, complexity and cost. You can improve your network security, get more control and simplify your infrastructure by instead adopting a Next Generation Firewall (NGFW) solution. A critical requirement for a great NGFW is performance – you need a Fortinet NGFW to deliver excellent security and control at throughput speeds that will keep up with the pace of your business and the traffic of your network, at the edge and core.

Trends Driving Next Generation Firewall Adoption

- Data breaches occur every day and organizations are increasingly under attack. You need better security. There were nearly 80,000 reported security incidents with 2,122 confirmed data breaches reported in the 2015 Verizon Data Breach Investigations Report. 700 million records were lost, representing about \$400M of financial loss to organizations.
- Network bandwidth requirements are doubling every 18 months due to rapid growth of connected devices, big data, virtualization, cloud storage and SaaS applications. Network throughput is critical. You need security that keeps up with the pace of your business.

- Earns the most top ratings across the attack lifecycle in independent testing
- Provides deeper visibility and control over more types of applications, users, and devices
- Delivers advanced visualizations and one-click actions from a single pane of glass.
- Leverages a high-speed platform boosted by purpose-built
 FortiASICs to deliver industry best performance



 IT executives consider network security a critical priority, but they also want to reduce the complexity associated with supporting multiple disparate security products. 76% of IT executives identify NGFWs as a top priority IT initiative. The most often cited benefits of NGFW are consolidation followed by added security against advanced threats and data breach. (IDG Research 2015)

Key Next Generation Firewall Requirements

- Highly Effective Security Your NGFW should include highly effective security backed by extensive threat intelligence to reduce your risk of data breach. A fully featured NGFW includes security features beyond Intrusion Prevention, Application Control and User Identity such as Web filtering, IP reputation, antivirus and sandboxing to break the kill chain of attacks.
- Visibility & Control Over Network Traffic The more you know, the more you can control. An NGFW should use deep inspection into network traffic to identify applications, users, devices, and threats enabling it to deliver better protection through context aware policy controls. Your NGFW solution should also come with single pane of glass management, advanced visualization components, and rich reporting to keep you informed and help you to make strategic security decisions.
- Performance and Reliability Next generation capabilities are only useful if your platform's performance, with desired features enabled, can keep up. To support business continuity and bandwidth requirements, your NGFW platform should deliver highly reliable core firewall capabilities, as well as the full range of next generation features, at high throughput speeds.

The Fortinet NGFW Solution

The FortiGate Next Generation Firewall delivers unparalleled protection, operational ease of use and ultra-fast performance.

Powered by FortiGuard Labs, FortiGate offers a wide range of integrated services including:

- Stateful Firewall
- Intrusion Prevention
- Application Control
- User/Device Identity & Authentication
- Anti-malware
- Sandboxing
- Web Filtering
- IP Reputation
- SSL Inspection
- IPSEC/SSL VPN
- Networking (LAN, WAN, Wi-Fi)
- Management & Reporting



Unparalleled Protection

Security solutions should stop attacks from damaging your organization and the more threats blocked, the better. Fortinet security technologies are the most validated by independent industry tests conducted by experts such as NSS Labs, Virus Bulletin and AV Comparatives.

Fortinet threat intelligence and security services are provided by FortiGuard Labs, our dedicated global threat research team. FortiGuard Labs delivers the most advanced threat intelligence to address all phases of the attack lifecycle with top rated security effectiveness. Threat researchers around the globe keep close watch on the threat landscape 24x365, enabling the FortiGuard Labs team to deliver updates to the entire Fortinet security ecosystem with some of the fastest response times in the industry.



<u>Click to See an Interactive Map</u> of Threats Being Monitored by FortiGuard Labs Live Right Now

Intrusion Prevention (IPS) is a core integrated NGFW capability and Fortinet IPS consistently demonstrates leading effectiveness in tests from NSS Labs. Most recently the Fortinet solution blocked over 99% of exploits in NSS Labs 2015 NGIPS industry tests.

More and more enterprises are implementing network-based antivirus, but most network security vendors only offer limited capabilities in this area. Fortinet offers a powerful antivirus engine that provides one-to-many signature matching, heuristics,



decompression and emulation, developed in-house by FortiGuard Labs. This engine consistently receives top Virus Bulletin, AV Comparatives and NSS Labs ratings that are as good or better than other AV vendors.

In addition to traditional malware protection, organizations are increasingly looking to NGFWs for protection from the latest advanced threats. Fortinet FortiSandbox earned the coveted NSS Labs Recommendation in the 2015 Breach Detection System Group Test and offers this capability as a FortiGuard security service accessible through the FortiGate or a dedicated on-premise physical or virtual appliance.

Operational Ease of Use

The unique single-platform approach of the Fortinet NGFW delivers end-to-end protection that is easier to buy, deploy and manage. A highly intuitive view of applications, users, devices, threats, cloud service usage, and deep inspection give you a better sense of what is happening on your network. With this strategic view, you can easily create and manage more granular security policies designed to optimize your security and your allocation of network resources.

- Identify thousands of different applications with Application Control (including Deep Application Control specific to Cloud services) to set up effective application aware policy enforcement. The FortiGate can inspect SSL encrypted and evasive traffic as well as traffic running on the latest protocols. These capabilities combined with other available security features can catch advanced attacks that hide within applications or within encrypted sessions.
- Set granular policies for different types of users with User Identity capabilities integrated in the FortiGate through integration with AD/LDAP, RADIUS, Exchange and other sources. This integrated NGFW capability is easily expanded to many more sources for user identity through the addition of FortiAuthenticator for large, diverse networks.
- Uniquely identify the type and OS of devices being used on the network without requiring agents or additional products to set stronger security policies for riskier types of devices.

- Speed incident response with advanced visualization such as custom threat maps specific to your organization, oneclick policies like device quarantine, and more.
- Reduce administrative workload by leveraging the broadest range of enterprise-class security services – that now include mobile malware and local sandbox intelligence – all consolidated and managed from a single pane of glass.

Monitor	 Add Filter 					■・	now 5 minute	s 1 hour 2	thours t
FortiView	A 6000 Threat Score								
Sources	5000 Threat Score 4000 Threat Score	mahalunku	Andreaking	handrunk	mana	mouhul	mount	minut	Low
Destinations Interfaces	3000 Threat Score 2000 Threat Score 1000 Threat Score	·····							High Critical
Policies	0 Threat Score	18:00 20:00	22:00 00:00	02:00 04	00 06:00	08:00 10:00	12:00	14:00	16:00
Countries	Source	Device	Threat Score	Blocked/Allowed) 🖨	Bytes (Ser	nt/Received) ©	Sessions (B	locked/Allowed	s) ©
WIFI Clients All Sessions	176.0.121.28	BYOD Phone	98880		1 Drill Down to D		309		
	176.0.128.183	BYOD Phone	9270	-			309		
Applications Cloud Applications Web Sites	176.0.140.81	BYOD Phone	9270		A Quarantine Sou	rce Address (176.0.121.2	8) 309		
	176.0.148.56	BYOD Phone	15450		250.60 kB		309		
	176.0.152.170	BYOD Phone	9270		517.27 kB	-	309		
	176.0.152.84	BYOD Phone	9270	-	164.08 kB	1	309		
Threats Threat Map FortiSandbox Failed Authentication	176.0.177.157	BYOD Phone	9270	-	340.52 kB		309		
	176.0.182.138	BYOD Phone	9270	-	168.10 kB	1	309		
	176.0.189.1	BYOD Phone	18540		173.04 kB	1	309		
	176.0.198.103	BYOD Phone	9270		538.28 kB		309		
System Events Admin Logins VPN	176.0.213.178	BYOD Phone	2575		371.28 kB		515		
	176.0.23.30	BYOD Phone	9270		440.63 kB		309		
	176.0.231.196	BYOD Phone	9270		1.31 MB		309		
	176.0.25.255	BYOD Phone	9270	-	1.31 MB	-	309		
• Network	> 176.0.30.225	BYOD Phone	9270		160.68 kB	1	309		
	176.0.36.194	BYOD Phone	9270		1.07 MB	-	309		

Industry's Fastest Platform

Fortinet delivers the fastest performing NGFW solution in the market. A FortiGate typically delivers 5x the NGFW performance when compared to comparably priced alternatives.

Purpose built FortiASIC processors drive performance at the heart of the FortiGate platform to deliver industry-leading, highspeed processing. This level of performance is necessary to deliver on the promise of a great NGFW. Deep next generation inspection and the consolidation of multiple security functions onto a single appliance require a high-performance platform to keep up with the speed of business.

At the same time, the software architecture leverages Optimum Path Processing to optimize the high performance hardware and software resources available in placket flow for maximum throughput. As a result, the FortiGate integrated architecture provides extremely high throughput and exceptionally low latency, while still delivering industry-leading security effectiveness and consolidating functions.

Summary

Organizations face an increasing risk of experiencing a data breach in an environment rapidly demanding more connectivity and bandwidth. Adding additional security is necessary but adding latency and complexity is not acceptable. The Next Generation Firewall is quickly becoming the standard approach for enterprise security. But it must deliver the high effectiveness and performance necessary to secure the organization without slowing the business.



Gartner predicts that 85% of Enterprise firewalls will be NGFW by the end of 2018

The Fortinet FortiGate NGFW solution delivers unparalleled protection, ease of use and ultra-fast performance – easily meeting all the requirements of an organization – more protection, reduced complexity, and high-speed throughput.

For more information on Fortinet's Next Generation Firewall solution, please visit: <u>http://www.fortinet.com/ngfw</u>

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