FORTINET®

INDEPENDENT VALIDATION OF FORTINET SOLUTIONS

NSS Labs Real-World Group Tests

NSS LABS
RECOMMENDED

Introduction

Organizations can get overwhelmed by vendor claims and alleged "silver bullets" when evaluating solutions that can reduce the risk of a data breach. An IT security purchase made solely based on vendor claims is likely to lead to regret. In a recent survey by Forrester Research[i] of next-generation firewall purchase decision makers, 71% surveyed would do more comprehensive testing during the evaluation process if they could do it over again, and 61% would also consider a broader selection of vendors. How do you navigate it all to make good decisions then?

71%
Would do more comprehensive testing during evaluation

61%
Would consider a broader selection of vendors

Fortinet believes that independent, third-party tests provide a critical and impartial measure of the quality of a product, and a mandatory reference for anyone making an IT Security purchase decision. Fortinet is committed to participation in unbiased credible testing so customers can see how we compare to alternative solutions and select the solution that is right for their needs. This commitment is why we consistently submit our products to a large number of third party independent tests for evaluation.

There are many analysts, researchers, and test houses who make it their business to provide their take on the various security solutions available. However, a relatively small number actually evaluate products in real-world, independent conditions. The leader in the independent testing space is NSS Labs.

Fortinet requires the following criteria to be met to participate in a review, test or assessment:

✓ Published, clearly defined methodology with customer and vendor input

✓ Enterprise customer environment with real-world traffic and current threats

✓ Not vendor sponsored or "pay to play"

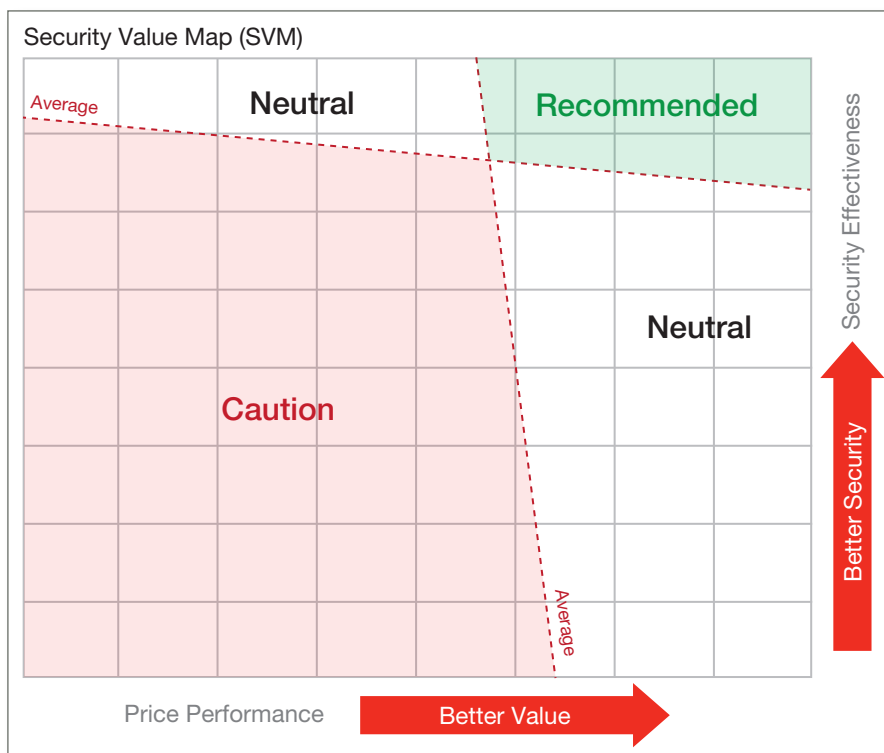✓ Report and ratings based on quantified criteria and demonstrated performance

Who is NSS Labs?

1. World's leading security product testing laboratory
2. Focused exclusively on IT security
3. In-depth security product test reports, research, and analyst services
4. Public methodologies open for vendor review and input
5. Tests conducted regularly and free of charge -- no compensation required for vendor participation
6. CEOs, CIOs, CISOs, and information security professionals rely on NSS to evaluate their security investments

[i] Your Best Defense: Next-Generation Firewalls Enable Zero Trust Security… Best Practices For Evaluating And Implementing A NGFW Forrester Research Inc. July 2015

How NSS Rates Products: Understanding The NSS Labs Security Value Map

NSS Labs assesses the security effectiveness and performance-adjusted total cost of ownership for each product. They typically publish their findings in a number of different reports starting, at the highest level with a summary of results called a "Security Value Map" or SVM. The SVM illustrates the relative value of security investment options by mapping security effectiveness and relative value of tested products. Each technology area – NGFW, IPS, WAF, Sandbox etc. – has its own SVM.

Security Value Map (SVM)

Average		**Neutral**		**Recommended**		

- Average
- Neutral
- Recommended
- Neutral
- Caution
- Average
- Security Effectiveness
- Better Security
- Price Performance
- Better Value

X-AXIS:

3 year TCO per protected unit of measure (Megabit per second, Connection per second)

**Y-AXIS:**

Security Effectiveness (block rate)

4 QUADRANTS:

Upper-right: "Recommended", products that provide an above average level of security effectiveness and value for money

Lower left: "Caution", products that offer below average value and security effectiveness

Upper left/Lower Right: "Neutral", may still be worthy of consideration depending on budget limitations.

The following is a review the most current SVMs across several key IT security technologies and offerings. SVMs pictured are the most current version as of date of publication of this document.

NSS Labs Next Generation Firewall (NGFW) Security Value Map™
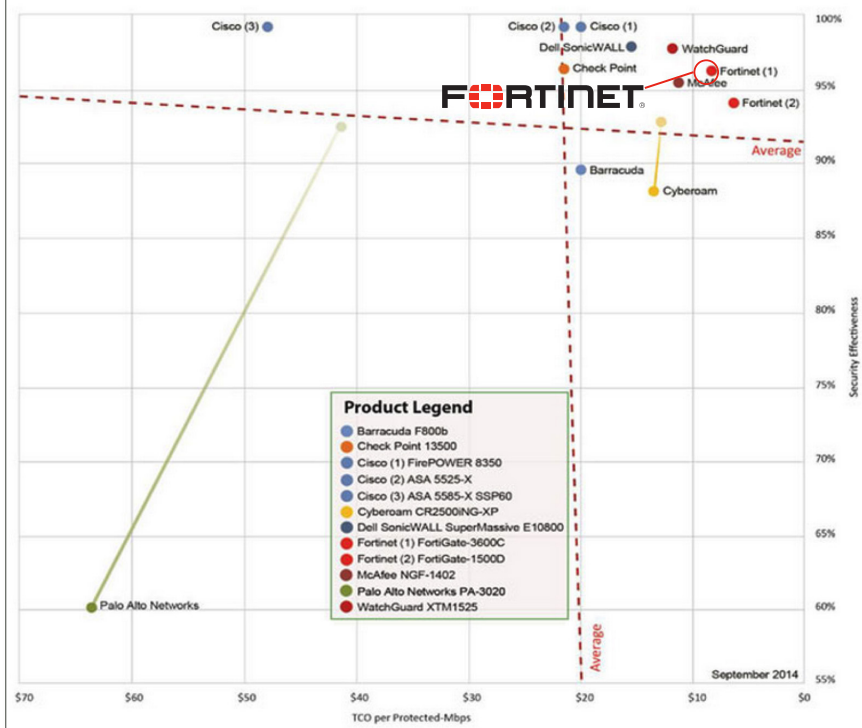
Next-Generation Firewall Test (2014)

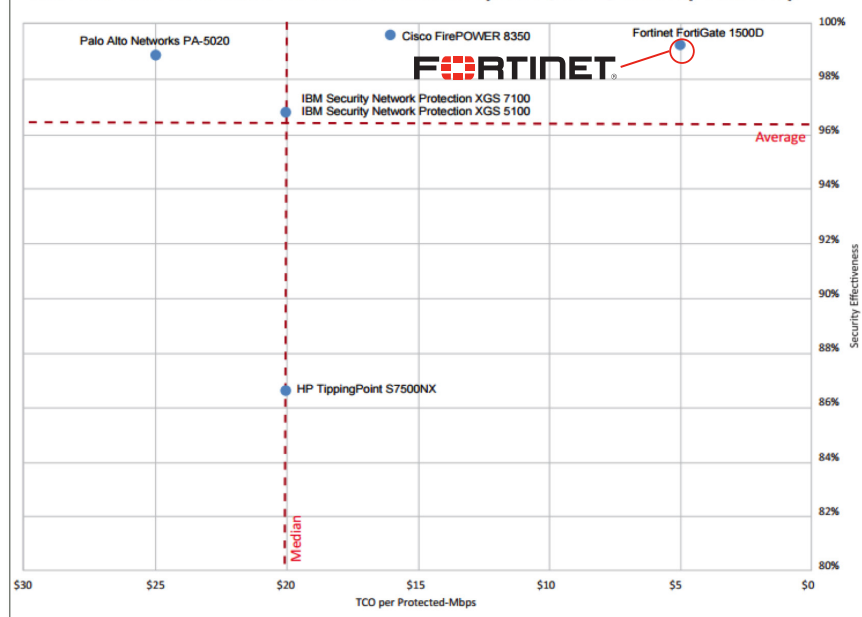**FortiGate 1500D and 3600C**

Capabilities Tested:

- Firewall
- Intrusion Prevention Systems (IPS)
- Application Control
- Reputation Services

Results:

- ✓ Both products "Recommended"
- ✓ Industry's Best Value

NSS Labs Next Generation Intrusion Prevention System (NGIPS) Security Value Map™

Next-Generation Intrusion Prevention Test (2015)
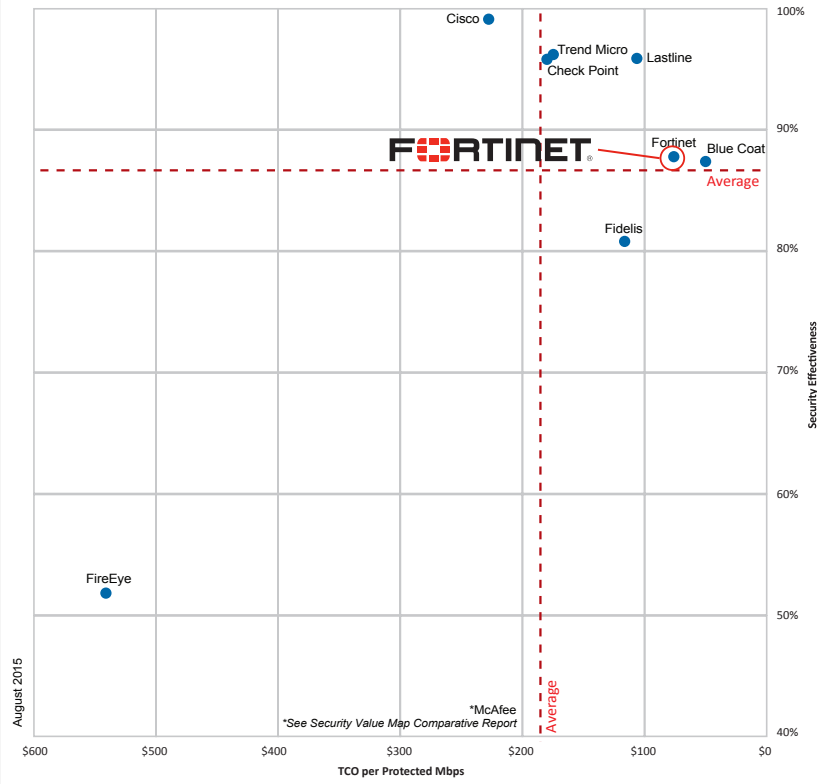
FortiGate 1500D

Capabilities Tested:

- Intrusion Prevention Systems (IPS)
- Application Control
- Reputation Services

Results:

- ✓ "Recommended"
- ✓ Industry's best value
- ✓ 99.2% exploit block rate

Breach Detection Systems (BDS) Security Value Map™

Chart showing Security Effectiveness (y-axis, 40%–100%) vs TCO per Protected Mbps (x-axis, $600–$0). Plotted vendors:
- Cisco
- Trend Micro
- Check Point
- Lastline
- Fortinet
- Blue Coat
- Fidelis
- FireEye
- *McAfee
- Average lines (horizontal and vertical)

*See Security Value Map Comparative Report

August 2015

Breach Detection Systems Test (2015)

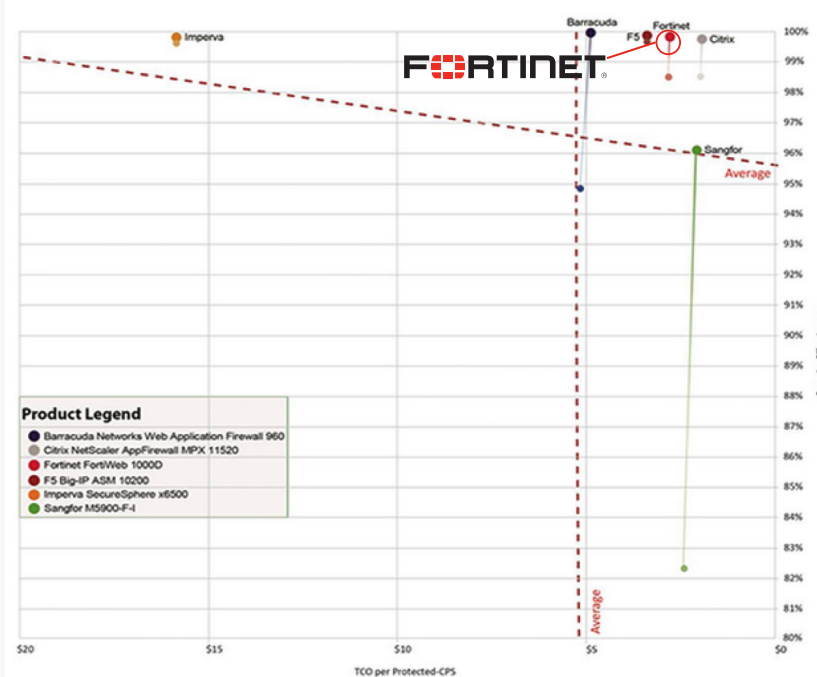**FortiSandbox 1000D v1.43 Build 0120**

Capabilities Tested:

- Malware Indentification
- Network Traffic Analysis
- Sandboxing
- Browser Emulation
- Reputation Services

Results:

✓ "Recommended"

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NSS Labs Web Application Firewall (WAF) Security Value Map™

Chart showing Security Effectiveness (y-axis, 80%–100%) vs TCO per Protected-CPS (x-axis, $20–$0). Plotted vendors:
- Imperva
- Barracuda
- Fortinet
- F5
- Citrix
- Sangfor
- Average line

Product Legend
- Barracuda Networks Web Application Firewall 960
- Citrix NetScaler AppFirewall MPX 11520
- Fortinet FortiWeb 1000D
- F5 Big-IP ASM 10200
- Imperva SecureSphere x6500
- Sangfor M5900-F-I

Web Application Firewall Test (2014)

FortiWeb 1000D

Tested against:

- Cookie Manipulation
- URL Manipulation
- SQL Injection
- Cross-site Scripting
- Evasion Tests

Results:

✓ "Recommended"

✓ 99.85% block rate

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Product	Block Rate	NSS Lab Rating
F-Secure Client Security Premium 11.60	100.00%	Recommended
Kaspersky Endpoint Security 10.2.2	100.00%	Recommended
Symantec Endpoint Protection 12.1	100.00%	Recommended
ESET Endpoint Antivirus 6.1	98.79%	Recommended
Fortinet FortiClient 5.2	98.79%	Recommended
Trend Micro OfficeScan 11.0	98.79%	Recommended
G Data Endpoint Protection 13.1	94.84%	Neutral
Sophos Endpoint Security and Control 10.3	89.18%	Neutral
Bitdefender Endpoint Security 5.3	85.34%	Neutral

Endpoint Vulnerability Exploit Test (2015)

FortiClient Endpoint Protection

Tested against:

- Live/Real-time Malware
- Live/Real-time Drive-By Exploits
- Live/Real-time Social Exploits/Document-Jacking

Results:

- ✓ "Recommended"
- ✓ 98.79% average block rate of Web-based exploits
- ✓ Consistency: Rated at 100% for the first 13 out of 15 days

No SVM was produced for the Endpoint Vulnerability Test

Real-Time NSS Labs Validation Now Available – NSS CAWS

NSS Labs product and comparative test reports represent one test period in time. For real-time results, NSS Labs has recently launched its Cyber Advanced Warning System (CAWS). CAWS is the world's first and only security as a service (SaaS) solution that pinpoints active exploits, measures your security efficacy immediately, and spotlights actual asset risk continuously.

In the CAWS portal, you can see security vendor product efficacy in real-time, against the latest threats, and see trends in solution efficacy over time. Being effective versus threats during one period of time is good, but consistency over time is critical to maximize your organizations protection against threats. CAWS can give you that insight to help you evaluate your choices.

Contact a Fortinet sales representative to give you a tour through CAWS and a look at real-time results, or simply visit www.nsslabs.com for more information on the Cyber Advanced Warning System.

Putting It All Together – The Only Edge to Endpoint Solution "Recommended" by NSS Labs

By participating in these tests, enterprises and Fortinet, have an indepedent measure of how our products rate against real-world enterprise requirements as well as alternative offerings. Earning "Recommended" ratings in each of the preceding NSS Labs tests, Fortinet stands out as the only vendor to provide an Advanced Threat Protection Solution that is NSS Labs "Recommended" from the edge to the endpoint.
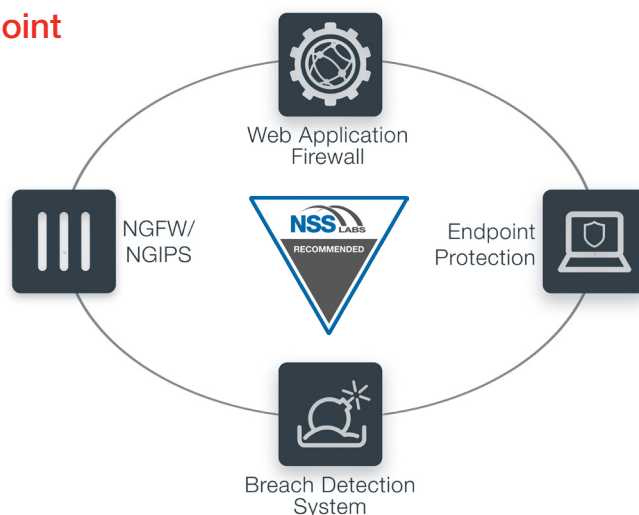
Fortinet is the only vendor to earn individual NSS Labs Recommendations for NGFW, NGIPS, WAF, BDS and EPP."

- Mike Spanbauer of NSS Labs

Looking at the 5-year summary of Fortinet ratings in NSS Labs group tests, a pattern emerges of consistent improvement and excellence, a growing list of "Recommended" ratings, and our ongoing commitment to participation in all relevant NSS Labs tests.

Product	2011	2012	2013	2014	2015
Firewall	Neutral		Recommended		
NGFW		Neutral	Recommended	Recommended	
IPS		Recommended	Neutral		
Data Center IPS				Neutral	
NGIPS					Recommended
Breach Detection				Recommended	Recommended
Web Application Firewall				Recommended	
Endpoint Protection					Recommended

Five years of historical data provided where available   Cell color indicates NSS rating (• Recommended, • Neutral, • Caution)   *As of September 2015*

"Real-world third-party validation is an essential resource for enterprises considering security products to help cut through confusion caused by vendor marketing, NSS Labs' testing continues to demonstrate Fortinet's commitment to meet high industry standards for security detection, performance, reliability, management and value."

- Fortinet CEO Ken Xie

Fortinet's Unparalleled Commitment To Independent Testing

Earning a Recommended rating from NSS Labs indicates that a product has performed well and deserves strong consideration. Only the most effective and best value products earn a Recommended rating from NSS—regardless of vendor market share, size or brand recognition. In a broad set of the most recent NSS Labs reports, Fortinet has consistently earned "Recommended" ratings. In NSS Labs' CAWS real-time service, customers can also see how Fortinet consistently delivers highly effective security over time.

Fortinet's commitment to independent testing and certification even extends beyond NSS Labs. ICSA, AV Comparatives, Virus Bulletin and other independent testing organizations have also consistently validated the effectiveness of Fortinet solutions. At the 2015 ICSA Labs awards reception, Fortinet was honored with ICSA's prestigious Excellence in Information Security Testing (EIST) award. Fortinet was recognized for outstanding achievement in information security certification testing for 10 years running.

Recommendation And Conclusion

To avoid the regret expressed by a majority of IT security purchasers in the Forrester study, avoid biased sources of information during your next IT security purchase evaluation.

- ✓ Consult independent, objective sources like NSS Labs to separate the truth from the hype.

- ✓ Conduct a bake off – either in-house or outsourced to a testing specialist. Test with real-world traffic loads to ensure the products can meet your requirements with the appropriate features activated.

- ✓ Select based on your criteria– effectiveness, ease of use, performance, price, vendor history and more may have a role to play.

Since its inception, Fortinet has committed to consistently proving the efficacy of its solutions through stringent independent testing and certification. The company has received more certifications to validate its solutions than any other network security vendor. These test results are proof that — in real world traffic and deployment scenarios — our products will beat the competition and perform as advertised.

GLOBAL HEADQUARTERS	EMEA SALES OFFICE	APAC SALES OFFICE	LATIN AMERICA SALES OFFICE
Fortinet Inc.	120 rue Albert Caquot	300 Beach Road 20-01	Paseo de la Reforma 412 piso 16
899 Kifer Road	06560, Sophia Antipolis,	The Concourse	Col. Juarez
Sunnyvale, CA 94086	France	Singapore 199555	C.P. 06600
United States	Tel: +33.4.8987.0510	Tel: +65.6513.3730	México D.F.
Tel: +1.408.235.7700			Tel: 011-52-(55) 5524-8428
www.fortinet.com/sales			