

NEXT GENERATION FIREWALL

SonicWall Security Value Map™ (SVM)

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Tested Products

NGFW Group Test: SonicWall NSA 6600 SonicOS Enhanced 6.2.5.10-70n

Dynamic signature database and engine rule definitions: [Gateway Anti-Virus – UTC 01/05/2017; Intrusion
Prevention – UTC 01/05/2017; Anti-Spyware – UTC 01/05/2017]

Follow-on Test: SonicWall NSA 6600 SonicOS Enhanced 6.2.5.10-70n

Dynamic signature database and engine rule definitions: [Gateway Anti-Virus – UTC 05/17/2017 16:31:39.000;
Intrusion Prevention – UTC 05/17/2017 19:29:30.000; Anti-Spyware – UTC 05/17/2017 19:28:09.000]¹

Environment

Next Generation Firewall (NGFW) Test Methodology v7.0

¹ Devices with signatures and engine rule definitions that are timestamped as above or later will have remediated versions. Updates take place automatically, so no additional action from the customer is required, so long as the device has Internet connectivity.

Overview

This document provides updated test results for the NSA 6600 SonicOS Enhanced 6.2.5.10-70n.

During the 2017 NGFW Group Test, the SonicWall NSA 6600 failed to detect 100 percent of evasions in the HTTP evasion test. This affected its placement in NSS' 2017 NGFW Security Value Map (SVM)™. After working closely with NSS, SonicWall rolled out the following signature database updates and engine rule definitions:

• [Gateway Anti-Virus – UTC 05/17/2017 16:31:39.000; Intrusion Prevention – UTC 05/17/2017 19:29:30.000; Anti-Spyware – UTC 05/17/2017 19:28:09.000]

The updated device was subjected to testing in our lab with the same test methodology used in the group test (NGFW v7.0), and the SonicWall NSA 6600 detected 100 percent of evasions in the HTTP evasion test. Although the device improved its overall evasion score by 73 percent, the device experienced a 0.1% drop in its exploit block rate and consequently a 5 Mbps drop in performance.

Key Findings

NSS NGFW Group Test

- The NSA 6600 achieved a 26.4% Security Effectiveness score and \$39 TCO per Protected Mbps (Value).
- The device failed to protect against the HTTP evasion technique. Please see the Test Report for additional details.

Follow-on Test

- SonicWall rolled out updated signature database updates and engine rule definitions: Gateway Anti-Virus UTC 05/17/2017 16:31:39.000; Intrusion Prevention UTC 05/17/2017 19:29:30.000; Anti-Spyware UTC 05/17/2017 19:28:09.000.
- The NSA 6600 achieved a 97.8% Security Effectiveness score and \$10 TCO per Protected Mbps (Value).
- The device proved effective against all evasion techniques tested.

The SVM illustrates the relative value of security investment by mapping the *Security Effectiveness* and the *Total Cost of Ownership (TCO) per Protected Mbps (Value)* of tested product configurations. The terms *TCO per Protected Mbps* and *Value* are used interchangeably throughout NSS reports.

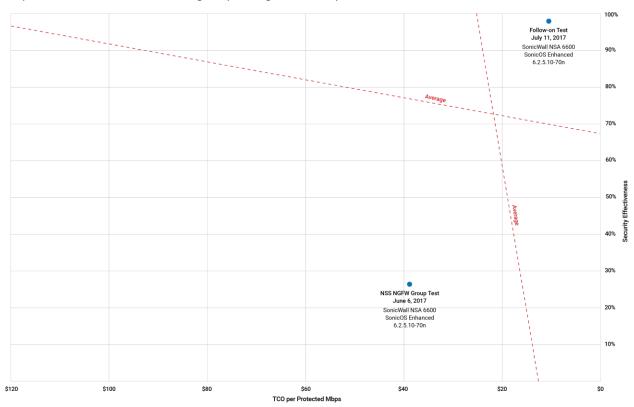


Figure 1 –2017 SonicWall Security Value Map™ (SVM)

Note: For guidance on how to read the SVM, please refer to the original NGFW SVM Comparative Report².

Product	NSS-Tested Throughput (Mbps)	Block Rate	Evasions	Security Effectiveness	TCO per Protected Mbps
SonicWall Group Test	3,772	97.9%	27.0%	26.4%	\$39
SonicWall Follow-on Test	3,767	97.8%	100%	97.8%	\$10

Figure 2 – Detailed Results

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 $^{^{\}rm 2}$ Next Generation Firewall Security Value Map Comparative Report

Detailed Results

SonicWall NSA 6600 SonicOS Enhanced 6.2.5.10-70n

NSS NGFW Group Test: June 6, 2017

 Dynamic signature database and engine rule definitions: [Gateway Anti-Virus – UTC 01/05/2017; Intrusion Prevention – UTC 01/05/2017; Anti-Spyware – UTC 01/05/2017]

NSS Exploit Library Block Rate	Using the recommended policy, the NSA 6600 blocked 95.38% of attacks against server applications, 96.71% of attacks against client applications, and 96.09% of attacks overall.	
CAWS (Live) Exploit Block Rate	The device blocked 99.76% of live exploits.	
Evasion Techniques	The device failed to protect against the HTTP evasion technique. Please see the Test Report for additional details.	
Stability and Reliability	The device passed all stability and reliability tests.	
Firewall Policy Enforcement	rall Policy Enforcement The device proved effective in enforcing all firewall policies.	
Application Control	NSS engineers verified that the device successfully determined the correct application and took the appropriate action based on the policy.	
The NSA 6600 is rated by NSS at 3,772 Mbps, which is higher than the vendor-claimed performance; SonicWall rates this device at 3 Gbps.		

Follow-on Test: July 11, 2017

Dynamic signature database and engine rule definitions: [Gateway Anti-Virus – UTC 05/17/2017 16:31:39.000;
Intrusion Prevention – UTC 05/17/2017 19:29:30.000; Anti-Spyware – UTC 05/17/2017 19:28:09.000]³

NSS Exploit Library Block Rate	Using the recommended policy, the NSA 6600 blocked 94.87% of attacks against server applications, 96.79% of attacks against client applications, and 95.90 of attacks overall.	
CAWS (Live) Exploit Block Rate	xploit Block Rate The device blocked 99.76% of live exploits.	
Evasion Techniques	The device proved effective against all evasion techniques tested.	
Stability and Reliability	ility and Reliability The device passed all stability and reliability tests.	
Firewall Policy Enforcement	The device proved effective in enforcing all firewall policies.	
Application Control	NSS engineers verified that the device successfully determined the correct application and took the appropriate action based on the policy.	
Performance Rating	The NSA 6600 is rated by NSS at 3,767 Mbps, which is higher than the vendor-claimed performance; SonicWall rates this device at 3 Gbps.	

³ Devices with signatures and engine rule definitions that are timestamped as above or later will have remediated versions. Updates take place automatically, so no additional action from the customer is required, so long as the device has Internet connectivity.

Test Methodology

Next Generation Firewall (NGFW) Test Methodology v7.0

A copy of the test methodology is available on the NSS Labs website at www.nsslabs.com.

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