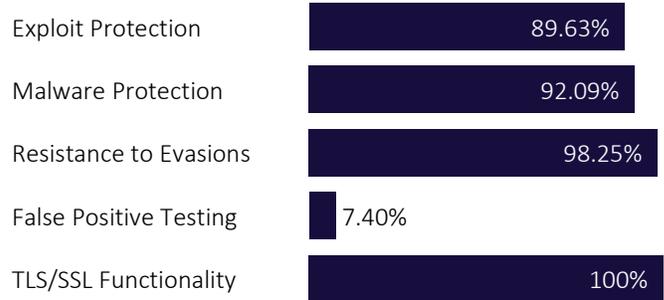# SSE Vendor Internet Protection

2024-01-29

OVERVIEW

81.10% SECURITY EFFECTIVENESS

On January 29, 2024 CyberRatings.org conducted an independent spot check for ACME Corporation of the SSE Vendor Internet Protection from our cloud testing facility in Austin, Texas. SSE Vendor was tested to measure the effectiveness of its protection against 2,025 exploits, 11,617 malware samples, and whether any of 1,430 evasions could bypass defenses. CyberRatings.org also tested to determine whether the service provided functional support for TLS/SSL 1.2 and 1.3 encrypted traffic using the most prevalent cipher suites.

Exploit Protection	89.63%
Malware Protection	92.09%
Resistance to Evasions	98.25%
False Positive Testing	7.40%
TLS/SSL Functionality	100%

Threat Prevention		Samples Tested	Samples Blocked	Blocked %
Exploit Protection		2,025	1,815	89.63 %
Wild Exploits		908	784	86.34 %
Exploit Library		1,117	1,031	92.30 %
Critical	9.0-10.0	438	388	88.58 %
Very High	8.0-8.9	21	19	90.48 %
High	7.0-7.9	426	403	94.60 %
Medium	6.0-6.9	232	221	95.26 %
Malware Protection		11,617	10,698	92.09 %
Wild Malware		574	422	73.52 %
Malware Library		11,043	10,276	93.05 %
Resistance to Evasions		1,403	1,405	98.25 %
HTTP Evasions		1,000	980	98.00 %
HTML Evasions		100	100	100.00 %
XML Evasions		10	9	90.00 %
JSON Evasions		10	8	80.00 %
Multipart/Form-Data Evasions		10	10	100.00 %
Portable Executable (packed, archived, etc.)		100	98	98.00 %
Layered Evasions		200	200	100.00 %
False Positive Rate		1,000	74	7.4 %

SSL/TLS Functionality			
Version	Prevalence	Cipher Suites	Results
TLS 1.3	66.51%	TLS_AES_256_GCM_SHA384 (0x13, 0x02)	Pass
TLS 1.2	11.85%	TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384 (0xC0, 0x30)	Pass
TLS 1.2	9.26%	TLS_ECDHE_RSA_WITH_AES_128_GCM_SHA256 (0xC0, 0x2F)	Pass
TLS 1.3	8.07%	TLS_AES_128_GCM_SHA256 (0x13, 0x01)	Pass
TLS 1.2	1.72%	TLS_ECDHE_RSA_WITH_CHACHA20_POLY1305_SHA256 (0xCC, 0xA8)	Pass
TLS 1.2	0.68%	TLS_ECDHE_RSA_WITH_AES_256_CBC_SHA384 (0xC0, 0x28)	Pass
TLS 1.3	0.55%	TLS_CHACHA20_POLY1305_SHA256 (0x13, 0x03)	Pass
TLS 1.2	0.42%	TLS_ECDHE_ECDSA_WITH_AES_256_GCM_SHA384 (0xC0, 0x2C)	Pass
TLS 1.2	0.27%	TLS_ECDHE_ECDSA_WITH_CHACHA20_POLY1305_SHA256 (0xCC, 0xA9)	Pass
TLS 1.2	0.20%	TLS_ECDHE_ECDSA_WITH_AES_128_GCM_SHA256 (0xC0, 0x2B)	Pass

SPECIAL THANKS

We would like to issue a special thank you to Keysight for providing their CyPerf and BreakingPoint tools for us to test the Malware Library and TLS functionality.

We would also like to thank TeraPackets for providing us with their Threat Replayer tool which enabled us to accurately replay exploits in a cloud environment.

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