



ADVANCED ENDPOINT PROTECTION COMPARATIVE REPORT

Security Value Map™ (SVM)

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Tested Products

Bitdefender GravityZone Ultra v6.6.7.106

Carbon Black CB Defense 3.2.10105

Check Point Software Technologies Check Point SandBlast Agent Next Generation AV E80.82.1

Cisco Advanced Malware Protection (AMP) for Endpoints 6.2.3.10807

Comodo Client Security 10.8.0.7053

Cylance CylancePROTECT + CylanceOPTICS v2.0.1500

Endgame Endpoint Security v3.3

enSilo Endpoint Security Platform v3.0

F-Secure Computer Protection Premium v18.14

Fortinet FortiClient v6.0.3

Kaspersky Lab Kaspersky Endpoint Security v11.0.1.90

Malwarebytes Endpoint Protection and Response v1.2.0.632

Panda Security Panda Adaptive Defense 360 v3.40.00

Sophos Intercept X Advanced v2.0.10

Symantec Endpoint Protection and Advanced Threat Protection (ATP) v14.2.1023.0100

Trend Micro Smart Protection for Endpoints v12.0.5024

Vendor A

Vendor B

Vendor C

Environment

NSS Labs Advanced Endpoint Protection (AEP) Test Methodology v3.0

NSS Labs Evasions Test Methodology v1.2

Overview

Empirical data from individual Test Reports and Comparative Reports is used to create NSS Labs’ unique Security Value Map™ (SVM). The SVM illustrates the relative value of security investment by mapping the *Security Effectiveness* and the *Total Cost of Ownership (TCO) per Protected Agent (Value)* of tested product configurations. The terms *TCO per Protected Agent* and *Value* are used interchangeably throughout the Comparative Reports.

The SVM provides an aggregated view of the detailed findings from NSS’ group tests. Individual Test Reports are available for each product tested and can be found at www.nsslabs.com. Comparative Reports provide detailed comparisons across all tested products in the following areas:

- Security
- TCO

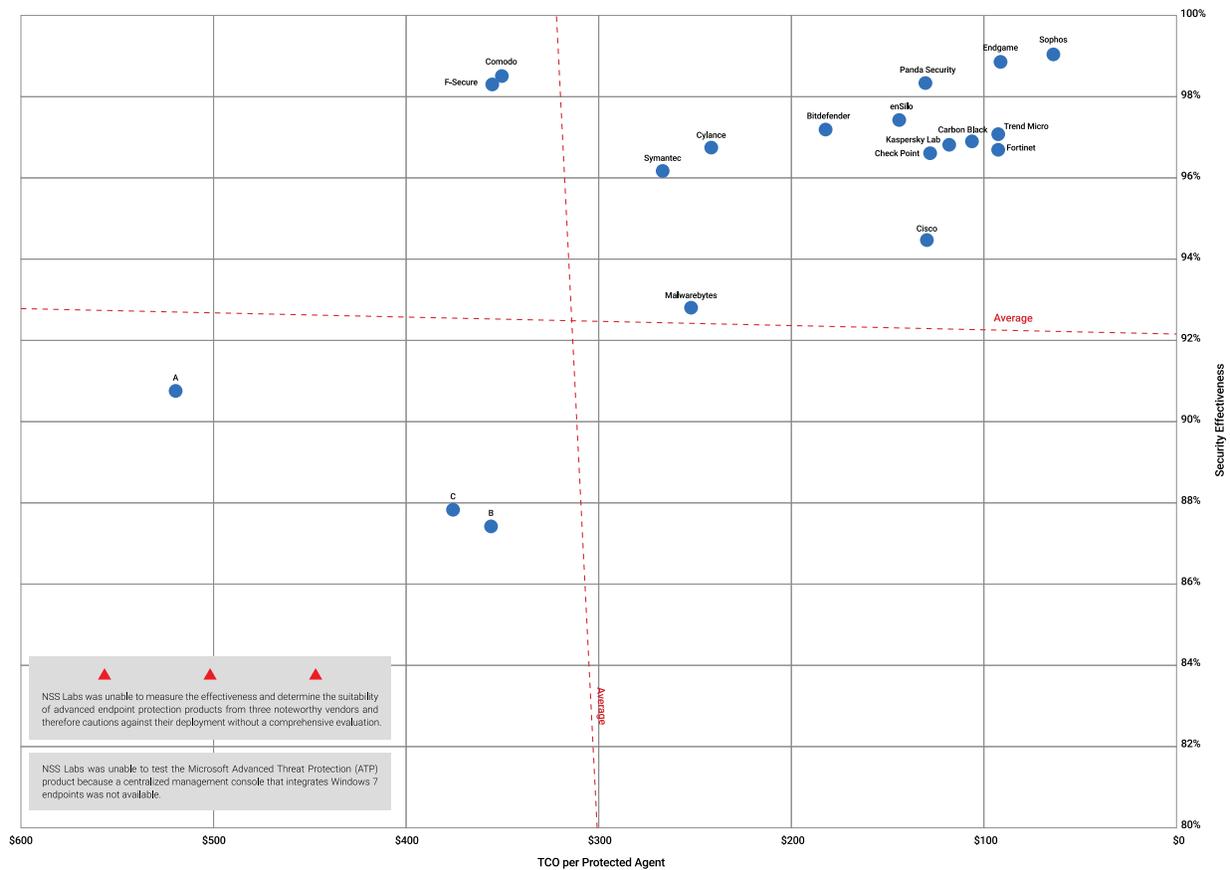


Figure 1 – NSS Labs’ 2019 Security Value Map (SVM) for Advanced Endpoint Protection (AEP) Products

Key Findings

- Fourteen products were rated as *Recommended* and two products were rated as *Security Recommended*.
- The *Security Effectiveness* of verified products ranged between 87.4% and 99.1% with fourteen of the nineteen verified products achieving a rating greater than 95%.
- The average *Security Effectiveness* rating was 92.2%; sixteen of the verified products received an above-average *Security Effectiveness* rating, and three received a below-average *Security Effectiveness* rating.
- The *TCO per Protected Agent* for verified products ranged between US\$64 and US\$520 with most tested products costing less than US\$150 per protected agent.
- The average *TCO per Protected Agent (Value)* was US\$322; fourteen products demonstrated value above the average, and five demonstrated value below the average.

Product Rating

The *Overall Rating* in Figure 2 is determined by which section of the SVM the product falls within: *Recommended* (top right), *Security Recommended* (top left), *Neutral* (bottom right), or *Caution* (bottom left). For more information on how the SVM is constructed, see the *How to Read the SVM* section of this document.

Product	Security Effectiveness		Value in US\$ (TCO per Protected Agent)		Overall Rating
	Score	Relative	Value	Relative	
Bitdefender	97.2%	Above Average	\$183	Above Average	Recommended
Carbon Black	96.9%	Above Average	\$107	Above Average	Recommended
Check Point	96.6%	Above Average	\$128	Above Average	Recommended
Cisco	94.5%	Above Average	\$130	Above Average	Recommended
Comodo	98.5%	Above Average	\$350	Below Average	Security Recommended
Cylance	96.8%	Above Average	\$242	Above Average	Recommended
Endgame	98.9%	Above Average	\$92	Above Average	Recommended
enSilo	97.4%	Above Average	\$144	Above Average	Recommended
Fortinet Technologies	96.7%	Above Average	\$93	Above Average	Recommended
F-Secure	98.3%	Above Average	\$355	Below Average	Security Recommended
Kaspersky Lab	96.8%	Above Average	\$118	Above Average	Recommended
Malwarebytes	92.8%	Above Average	\$252	Above Average	Recommended
Panda Security	98.4%	Above Average	\$131	Above Average	Recommended
Sophos	99.1%	Above Average	\$64	Above Average	Recommended
Symantec	96.2%	Above Average	\$267	Above Average	Recommended
Trend Micro	97.1%	Above Average	\$93	Above Average	Recommended
Vendor A	90.8%	Below Average	\$520	Below Average	Caution
Vendor B	87.4%	Below Average	\$356	Below Average	Caution
Vendor C	87.8%	Below Average	\$376	Below Average	Caution

Figure 2 – NSS Labs’ 2019 Recommendations for Advanced Endpoint Protection (AEP) Products

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Figure 3 – Example SVM5

How to Read the SVM

The SVM depicts the value of a typical deployment of 2,500 agents.

This report is part of a series of comparative reports on the security and total cost of ownership (TCO) of tested advanced endpoint protection (AEP) products. For more information, visit www.nsslabs.com.

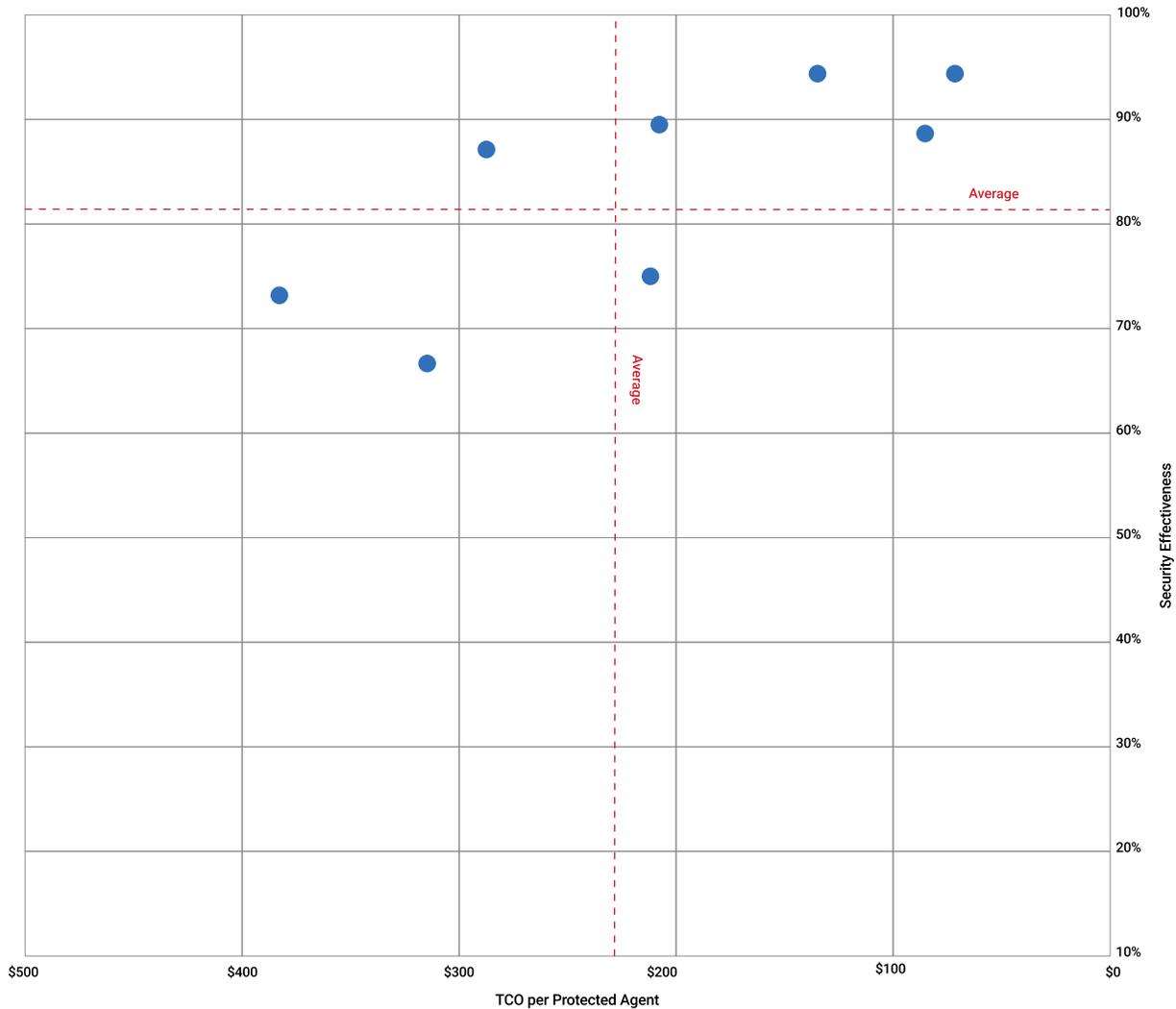


Figure 3 – Example SVM

No two security products deliver the same security effectiveness or TCO, making precise comparisons extremely difficult. In order to enable value-based comparisons of AEP products on the market, NSS has developed a unique metric: *TCO per Protected Agent*. For more information, see the TCO Comparative Report at www.nsslabs.com.

The x axis displays the *TCO per Protected Agent* in US dollars, which decreases from left to right. The *Overall Capability Score* calculations are used to determine the *TCO per Protected Agent*, which in turn is used to plot a product’s value on the x axis in the SVM. A product’s capability to detect threats that were not blocked reduces the operational burden and cost of remediating infections and incidents (breaches). For additional information on TCO, please see the Comparative Report on TCO at www.nsslabs.com.

The *Security Effectiveness* score, which is represented on the *y* axis of the SVM, does not include the *Additional Detection Rate* since the focus of an AEP product is on blocking threats.

The *y* axis displays the *Security Effectiveness* score as a percentage. Security effectiveness is greater toward the top of the *y* axis. Products that are missing critical security capabilities will have a reduced *Security Effectiveness* score.

The SVM displays two dotted lines that represent the average *Security Effectiveness* and *TCO per Protected Agent* of all the tested products. These lines divide the SVM into four unequally sized sections. Where a product's *Security Effectiveness* and *TCO per Protected Agent* scores map on the SVM determine which section it falls into:

- **Recommended:** Products that map into the upper-right section of the SVM score well for both *Security Effectiveness* and *TCO per Protected Agent*. These products provide a high level of detection and value for money.
- **Security Recommended:** Products that map into the upper-left section of the SVM are suitable for environments requiring a high level of detection, albeit at a higher-than-average cost.
- **Neutral:** Products that map into the lower-right section of the SVM may be good choices for organizations where a slightly lower level of detection is acceptable in exchange for a lower TCO.
- **Caution:** Products that map into the lower-left section of the SVM offer limited value for money given their three-Year TCO and measured *Security Effectiveness*.

In all cases, the SVM should only be a starting point. Enterprise customers can contact NSS to model their own SVM in order to better understand which products might be best for them.

Test Methodology

NSS Labs Advanced Endpoint Protection (AEP) Test Methodology v3.0

NSS Labs Evasions Test Methodology v1.2

Copies of the test methodologies are available at www.nsslabs.com.

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