

Covering the global threat landscape

VB100 CERTIFICATION REPORT DECEMBER 2018

Martijn Grooten

INTRODUCTION

Anti-virus has long stopped being the sole layer of defence against malware attacks. Given its more subtle role, it is all the more important that users and organizations can rely on their endpoint solutions to satisfy a minimum standard.

For more than two decades, *Virus Bulletin* has set a minimum standard for anti-virus (or anti-malware) products, checking whether products live up to expectation and providing those that do with the VB100 ‘stamp of approval’.

This report details the performance of 29 of such products from 27 different vendors during November and December 2018.

THE VB100 SET-UP

In the VB100 test, a copy of the product to be tested is installed on two platforms: *Windows 10* and *Windows 7*. On each platform, and at three different times in the test, the product is asked to scan both the latest version of the WildList¹ and a selection of clean files taken from *Virus Bulletin*’s own set of files belonging to widely used legitimate software.

A legitimate file that is blocked at least once is considered a false positive, while a WildList file that isn’t blocked is considered a miss.

A product achieves a VB100 certification if:

- No more than 0.5% of WildList samples are missed and
- No more than 0.01% of legitimate files are blocked

¹ The WildList is an extremely well-vetted set of malware recently observed in the wild by researchers: <http://www.wildlist.org/>.

For full details, we refer to the VB100 methodology on the *Virus Bulletin* website: <https://www.virusbulletin.com/testing/vb100/vb100-methodology/vb100-methodology-ver1-1/>. This test used version 1.1 of the VB100 methodology.

DIVERSITY TEST

The malware part of the VB100 certification uses the WildList, a regularly updated list of extremely well vetted malware samples, guaranteed to have been spotted in the wild multiple times. This makes them very suitable for a certification test like VB100.

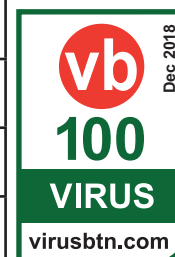
The ‘Diversity Test’ looks at products’ detection of another set of recent malware samples, to acknowledge the fact that products detect malware samples beyond a standard set of samples, and provides a measure of that detection.

PRODUCTS & RESULTS

Products were allowed to download updates during the course of the test. The version numbers listed in the results that follows refer to those at the start of the test.

AhnLab V3 Internet Security 9.0

Windows 7 version	9.0.49.2
Windows 10 version	9.0.50.5
WildList detection	100.0%
False positive rate	0.000%
Diversity test rate	100.00%



Arcabit AntiVirus

Windows 7 version	2018.11.05
Windows 10 version	2018.11.06
WildList detection	100.0%
False positive rate	0.000%
Diversity test rate	100.00%



Emsisoft Anti-Malware

Windows 7 version	2018.10.0.9018
Windows 10 version	2018.10.0.9018
WildList detection	100.0%
False positive rate	0.000%
Diversity test rate	100.00%



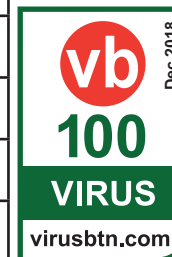
Avast Free Antivirus

Windows 7 version	18.7.2354
Windows 10 version	18.7.2354
WildList detection	100.0%
False positive rate	0.000%
Diversity test rate	99.49%



eScan Internet Security Suite for Windows

Windows 7 version	14.0.1400.2029
Windows 10 version	14.0.1400.2029
WildList detection	100.0%
False positive rate	0.000%
Diversity test rate	100.00%



AVG Internet Security

Windows 7 version	18.7.3069
Windows 10 version	18.7.3069
WildList detection	100.0%
False positive rate	0.000%
Diversity test rate	99.49%



ESET Internet Security

Windows 7 version	12.0.27.0
Windows 10 version	12.0.27.0
WildList detection	100.0%
False positive rate	0.000%
Diversity test rate	100.00%



Defenx Security Suite

Windows 7 version	15.1.0112
Windows 10 version	15.1.0112
WildList detection	100.0%
False positive rate	0.000%
Diversity test rate	99.69%



ESTsecurity ALYac

Windows 7 version	3.0.1.3
Windows 10 version	3.0.1.3
WildList detection	100.0%
False positive rate	0.000%
Diversity test rate	100.00%



Exosphere Endpoint Protection

Windows 7 version	2.2.0.57
Windows 10 version	2.2.0.57
WildList detection	100.0%
False positive rate	0.001%
Diversity test rate	99.90%



G DATA Antivirus

Windows 7 version	25.5.0.2
Windows 10 version	25.5.0.2
WildList detection	100.0%
False positive rate	0.000%
Diversity test rate	99.90%



Faronics Anti-Virus

Windows 7 version	4.12.3102.401
Windows 10 version	4.12.3102.401
WildList detection	100.0%
False positive rate	0.008%
Diversity test rate	100.00%



IKARUS anti.virus

Windows 7 version	2.19.14
Windows 10 version	2.19.14
WildList detection	100.0%
False positive rate	0.001%
Diversity test rate	99.90%



FireEye Endpoint Security

Windows 7 version	27.30.4
Windows 10 version	27.30.4
WildList detection	100.0%
False positive rate	0.000%
Diversity test rate	100.00%



K7 Total Security

Windows 7 version	15.1.0345
Windows 10 version	15.1.0345
WildList detection	100.0%
False positive rate	0.000%
Diversity test rate	99.69%



Fortinet FortiClient

Windows 7 version	5.6.2.1117
Windows 10 version	5.6.2.1117
WildList detection	100.0%
False positive rate	0.000%
Diversity test rate	99.90%



Kaspersky Endpoint Security 10 for Windows

Windows 7 version	11.0.0.6499
Windows 10 version	11.0.0.6499
WildList detection	100.0%
False positive rate	0.000%
Diversity test rate	100.00%



NANO Antivirus

Windows 7 version	1.0.134.89835
Windows 10 version	1.0.134.89835
WildList detection	100.0%
False positive rate	0.000%
Diversity test rate	99.90%



TeamViewer Endpoint Protection

Windows 7 version	1.0.105328
Windows 10 version	1.0.129712
WildList detection	100.0%
False positive rate	0.000%
Diversity test rate	100.00%



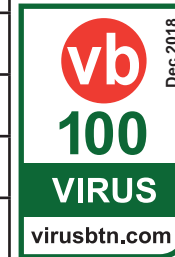
Rising Security Cloud Client

Windows 7 version	3.0.0.83
Windows 10 version	3.0.1.14
WildList detection	100.0%
False positive rate	0.000%
Diversity test rate	65.27%



Tencent PC Manager

Windows 7 version	12.3.26589.901
Windows 10 version	12.3.26590.901
WildList detection	100.0%
False positive rate	0.000%
Diversity test rate	100.00%



SafeCentral Security Suite

Windows 7 version	2.0.1430
Windows 10 version	2.0.1430
WildList detection	100.0%
False positive rate	0.000%
Diversity test rate	100.00%



TotalAV

Windows 7 version	4.9.36
Windows 10 version	4.9.36
WildList detection	99.8%
False positive rate	0.006%
Diversity test rate	98.36%



TACHYON Endpoint Security

Windows 7 version	5.0.0.57
Windows 10 version	5.0.0.57
WildList detection	100.0%
False positive rate	0.006%
Diversity test rate	99.90%



Total Defense Premium

Windows 7 version	9.0.0.747
Windows 10 version	9.0.0.747
WildList detection	100.0%
False positive rate	0.000%
Diversity test rate	100.00%



Total Defense Unlimited

Windows 7 version	11.0.0.775
Windows 10 version	11.0.0.775
WildList detection	100.0%
False positive rate	0.000%
Diversity test rate	100.00%



VIPRE Advanced Security

Windows 7 version	11.0.3.20
Windows 10 version	11.0.3.20
WildList detection	100.0%
False positive rate	0.000%
Diversity test rate	100.00%



VirIT eXplorer PRO

Windows 7 version	8.7.98
Windows 10 version	8.8.0
WildList detection	100.0%
False positive rate	0.000%
Diversity test rate	41.19%



Zemana EndPoint Security

Windows 7 version	6.6.4.68
Windows 10 version	6.6.4.68
WildList detection	100.0%
False positive rate	0.000%
Diversity test rate	100.00%



APPENDIX 1: PRODUCTS NOT CERTIFIED

Cyren failed to achieve VB100 certification in this test due to a technical issue with the scanner that affected the first testing part; the issue has since been resolved. Cyren told us that only on-access protection was affected, and users would have been protected by other layers of defence.

APPENDIX 2: EXCLUDED PARTS

Technical and other issues can render the data we collect insufficient or otherwise unsuitable for accurate reporting. In such cases, the methodology allows us to discard the affected test part and record the event below. Two healthy test parts out of three are required for the certification to be issued.

No test parts had to be excluded for any product.

APPENDIX 3: SAMPLE SET SIZES

The WildList contained 3,091 samples. The set of clean files used for the false positive test contained 100,000 files, of which 29,071 were portable executable (PE) files. The set used for the Diversity Test contained 976 samples.

Editor: Martijn Grooten

Head of Testing: Peter Karsai

Security Test Engineers: Adrian Luca, Tony Oliveira, Ionuț Răileanu

Sales Executive: Allison Sketchley

Editorial Assistant: Helen Martin

Developer: Lian Sebe

© 2018 Virus Bulletin Ltd, The Pentagon, Abingdon Science Park, Abingdon, Oxfordshire OX14 3YP, England

Tel: +44 (0)1235 555139 Email: editor@virusbulletin.com

Web: <https://www.virusbulletin.com/>