virus
BULLETIN

VB100 CERTIFICATION REPORT AUGUST 2018

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INTRODUCTION

The endpoint security market is changing rapidly and marketing departments like to make a lot of noise about next-gen (or next-next-gen) technology, often using some kind of machine learning. These are important developments, but at the core of every product is an engine that, when given a file, determines whether it is malicious or not.

The VB100 certification reports check whether this engine, and thus the product, satisfies a minimum standard: when looking to purchase a new endpoint security product, we recommend looking for a product that consistently achieves VB100 certification.

This test report details the performance of 30 anti-virus products from 29 different vendors during July and August 2018, all of which achieved a VB100 award.

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 WildList[1] 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

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', which debuts in this report, shows detection of another set of recent malware samples, to acknowledge the fact that products detect malware samples beyond a standard set of samples and provide 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	9.0.48.1
Windows 10 version	9.0.48.1
WildList detection	99.9%
False positive rate	0.000%
Diversity test rate	100.00%

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

Arcabit AntiVirus

Windows 7 version	2018.07.10
Windows 10 version	2018.07.11
WildList detection	100.0%
False positive rate	0.000%
Diversity test rate	100.00%

Cyren Command Anti-Malware

Windows 7 version	5.1.38
Windows 10 version	5.1.38
WildList detection	100.0%
False positive rate	0.000%
Diversity test rate	100.00%

Avast Free Antivirus

Windows 7 version	18.5.2342
Windows 10 version	18.5.2342
WildList detection	100.0%
False positive rate	0.000%
Diversity test rate	100.00%

Defenx Security Suite

Windows 7 version	15.1.0111
Windows 10 version	15.1.0111
WildList detection	100.0%
False positive rate	0.001%
Diversity test rate	100.00%

AVG Internet Security

Windows 7 version	18.5.3059
Windows 10 version	18.5.3059
WildList detection	100.0%
False positive rate	0.000%
Diversity test rate	100.00%

Emsisoft Anti-Malware

Windows 7 version	2018.6.0.8750
Windows 10 version	2018.6.0.8750
WildList detection	100.0%
False positive rate	0.000%
Diversity test rate	100.00%

Bitdefender Endpoint Security

Windows 7 version	6.6.2.49
Windows 10 version	6.6.2.49
WildList detection	100.0%
False positive rate	0.000%
Diversity test rate	100.00%

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%
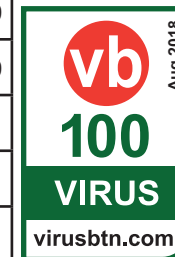
ESET Internet Security

Windows 7 version	11.0.159.9
Windows 10 version	11.0.159.9
WildList detection	100.0%
False positive rate	0.000%
Diversity test rate	100.00%

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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	100.00%

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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%

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G DATA Antivirus

Windows 7 version	25.4.0.3
Windows 10 version	25.4.0.3
WildList detection	100.0%
False positive rate	0.000%
Diversity test rate	100.00%

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Faronics Anti-Virus

Windows 7 version	4.12.3102.401
Windows 10 version	4.12.3102.401
WildList detection	100.0%
False positive rate	0.005%
Diversity test rate	100.00%

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Hammock AssetView

Windows 7 version	10.2.0
Windows 10 version	10.2.0
WildList detection	100.0%
False positive rate	0.000%
Diversity test rate	100.00%

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FireEye Endpoint Security

Windows 7 version	26.21.8
Windows 10 version	26.21.8
WildList detection	100.0%
False positive rate	0.000%
Diversity test rate	100.00%

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IKARUS anti.virus

Windows 7 version	2.16.20
Windows 10 version	2.16.20
WildList detection	100.0%
False positive rate	0.000%
Diversity test rate	100.00%

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K7 Total Security

Windows 7 version	15.1.0339
Windows 10 version	15.1.0339
WildList detection	100.0%
False positive rate	0.001%
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%

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%

TACHYON Endpoint Security

Windows 7 version	5.0.0.57
Windows 10 version	5.0.0.57
WildList detection	100.0%
False positive rate	0.007%
Diversity test rate	99.99%

NANO Antivirus

Windows 7 version	1.0.116.88902
Windows 10 version	1.0.116.88902
WildList detection	100.0%
False positive rate	0.001%
Diversity test rate	100.00%

TeamViewer ITbrain Anti-Malware

Windows 7 version	1.0.101188
Windows 10 version	1.0.101188
WildList detection	100.0%
False positive rate	0.000%
Diversity test rate	100.00%

Rising Security Cloud Client

Windows 7 version	3.0.0.78
Windows 10 version	3.0.0.78
WildList detection	100.0%
False positive rate	0.000%
Diversity test rate	100.00%

Tencent PC Manager

Windows 7 version	12.3.26562.901
Windows 10 version	12.3.26562.901
WildList detection	100.0%
False positive rate	0.000%
Diversity test rate	100.00%
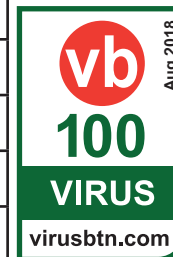
TotalAV

Windows 7 version	4.6.19
Windows 10 version	4.6.19
WildList detection	99.8%
False positive rate	0.000%
Diversity test rate	44.63%

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%

VIPRE Advanced Security

Windows 7 version	10.3.4.2
Windows 10 version	10.3.4.2
WildList detection	100.0%
False positive rate	0.000%
Diversity test rate	100.00%

VirIT eXplorer PRO

Windows 7 version	8.7
Windows 10 version	8.7
WildList detection	100.0%
False positive rate	0.001%
Diversity test rate	100.00%

Zemana EndPoint Security

Windows 7 version	6.6.1.36
Windows 10 version	6.6.1.36
WildList detection	100.0%
False positive rate	0.000%
Diversity test rate	100.00%

APPENDIX 1: PRODUCTS NOT CERTIFIED

All tested products were certified.

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.

- For *TotalAV*, the third certification part on *Windows 7* was discarded due to technical issues.

APPENDIX 3: SAMPLE SET SIZES

The WildList contained 990 samples. The set of clean files used for the false positive test contained 100,000 files, of which 29,199 were portable executable (PE) files. The set used for the Diversity Test contained 997 samples.