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Covering the global threat landscape

VB100 CERTIFICATION REPORT AUGUST 2019

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Since the inception of the VB100 certification scheme in 1998, both the threat landscape and the products tested by the scheme have evolved, but the VB100 award remains as relevant now as it was 21 years ago – providing a stamp of quality and competence for anti-malware products that satisfy a minimum standard of detecting malicious executables that have recently been seen in the wild, while blocking few to no legitimate programs.

This report details the VB100 certification of 37 anti-malware products from 34 different vendors during July and August 2019.

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

[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 follow refer to those at the start of the test.

Adaware Antivirus Free

Windows 7 version	12.6.1005.11662
Windows 10 version	12.6.1005.11662
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	99.69%

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Adaware Antivirus Pro

Windows 7 version	12.6.1005.11662
Windows 10 version	12.6.1005.11662
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	99.69%

Ad-Spider

Windows 7 version	2019.07.08-7.81300
Windows 10 version	2019.07.08-7.81300
WildList detection	100.0%
False positive rate	0.001%
Diversity Test rate	99.69%

AhnLab V3 Internet Security 9.0

Windows 7 version	9.0.56.1
Windows 10 version	9.0.56.1
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	100.00%

Arcabit AntiVirus

Windows 7 version	2019.07.07
Windows 10 version	2019.07.03
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	99.79%

Avast Free Antivirus

Windows 7 version	19.6.2383
Windows 10 version	19.6.2383
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	100.00%

AVG Internet Security

Windows 7 version	19.6.3098
Windows 10 version	19.6.3098
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	100.00%

Cynet 360

Windows 7 version	8.3.54.60
Windows 10 version	8.3.54.58
WildList detection	99.9%
False positive rate	0.000%
Diversity Test rate	100.00%

Cyren Command Anti-Malware

Windows 7 version	5.2.1
Windows 10 version	5.2.1
WildList detection	100.0%
False positive rate	0.008%
Diversity Test rate	98.24%

Defenx Security Suite

Windows 7 version	1.2.1.2
Windows 10 version	1.2.1.2
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	97.93%

Emsisoft Anti-Malware

Windows 7 version	2019.6.0.9533
Windows 10 version	2019.6.0.9533
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	99.8%
False positive rate	0.000%
Diversity Test rate	99.69%

ESET Internet Security

Windows 7 version	12.1.34.0
Windows 10 version	12.1.34.0
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	100.00%

ESTsecurity ALYac

Windows 7 version	4.0.2.23116
Windows 10 version	4.0.2.23116
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	99.79%

Exosphere Endpoint Protection

Windows 7 version	8.3.54.36
Windows 10 version	8.3.54.58
WildList detection	99.8%
False positive rate	0.000%
Diversity Test rate	99.69%

Faronics Anti-Virus

Windows 7 version	4.20.3102.471
Windows 10 version	4.20.3102.471
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	100.00%

FireEye Endpoint Security

Windows 7 version	29.7.0
Windows 10 version	29.7.0
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	99.79%

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%

G DATA Antivirus

Windows 7 version	25.5.0.2
Windows 10 version	25.5.0.4
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	100.00%

Hammock AssetView

Windows 7 version	11.0.0.2202
Windows 10 version	11.0.0.2202
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	100.00%

Heimdal Thor Vigilance

Windows 7 version	2.5.201
Windows 10 version	2.5.201
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	99.79%

IKARUS anti.virus

Windows 7 version	2.19.14
Windows 10 version	2.19.14
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	99.79%

K7 Total Security

Windows 7 version	15.1.0362
Windows 10 version	15.1.0362
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	99.79%

Kaspersky Endpoint Security 11 for Windows

Windows 7 version	11.1.0.15919
Windows 10 version	11.1.0.15919
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	99.79%

NANO Antivirus

Windows 7 version	1.0.134.90395
Windows 10 version	1.0.134.90385
WildList detection	100.0%
False positive rate	0.002%
Diversity Test rate	99.38%

PCProtect

Windows 7 version	4.13.75
Windows 10 version	4.13.75
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	99.79%

Rising Security Cloud Client

Windows 7 version	3.0.0.85
Windows 10 version	3.0.0.90
WildList detection	100.0%
False positive rate	0.004%
Diversity Test rate	84.25%

Scanguard

Windows 7 version	4.13.75
Windows 10 version	4.13.75
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	99.79%

TACHYON Endpoint Security

Windows 7 version	5.0.0.57
Windows 10 version	5.0.0.57
WildList detection	99.9%
False positive rate	0.002%
Diversity Test rate	99.90%

TeamViewer Endpoint Protection

Windows 7 version	1.2.188548
Windows 10 version	1.2.188548
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	99.79%

Tencent PC Manager

Windows 7 version	12.3.26607.901
Windows 10 version	12.3.26607.901
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	99.90%

TotalAV

Windows 7 version	4.13.75
Windows 10 version	4.13.75
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	99.79%

Total Defense Premium

Windows 7 version	11.5.0.222
Windows 10 version	11.5.0.222
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	99.69%

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	99.69%

VIPRE Advanced Security

Windows 7 version	11.0.4.2
Windows 10 version	11.0.4.2
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	99.90%

VirIT eXplorer PRO

Windows 7 version	8.9.65
Windows 10 version	8.9.65
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	65.39%

Wontok SafeCentral Security Suite

Windows 7 version	2.0.1548
Windows 10 version	2.0.1548
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	100.00%

APPENDIX 1: PRODUCTS NOT CERTIFIED

All participating products achieved VB100 certification in this test.

APPENDIX 2: EXCLUDED PARTS

- For *eScan Internet Security Suite for Windows*, the second certification part for *Windows 10* was discarded due to technical issues.
- For *Fortinet FortiClient*, the first certification part for *Windows 7* was discarded due to technical issues.
- For *NANO Antivirus*, the diversity test results for *Windows 7* were discarded due to technical issues.

APPENDIX 3: SAMPLE SET SIZES

The WildList sample set contained 1,508 samples. The set of clean files used for the false positive test contained 99,997 files, of which 29,192 were portable executable (PE) files. The set used for the Diversity Test contained 965 samples.

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