

virus

BULLETIN

Covering the global threat landscape

VB100 CERTIFICATION REPORT OCTOBER 2019

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The VB100 certification scheme – which has been in operation since 1998 yet remains as relevant now as it was back then – provides 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 38 anti-malware products from 33 different vendors during September 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 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

¹The 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.

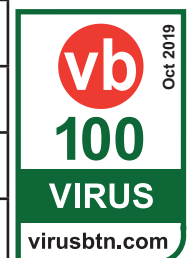
The 'Diversity Test' looks at products' detection of another set of recent malware samples, to acknowledge the fact that products detect malware samples beyond a standard set of samples, and provides a measure of that detection.

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.

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	100.00%



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	100.00%



Avast Free Antivirus

Windows 7 version	19.7.2388
Windows 10 version	19.7.2388
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	100.00%



Ad-Spider

Windows 7 version	2019.09.09
Windows 10 version	2019. 09. 10
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	100.00%



AVG Internet Security

Windows 7 version	19.7.3103
Windows 10 version	19.7.3103
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	100.00%



AhnLab V3 Internet Security 9.0

Windows 7 version	9.0.57.1
Windows 10 version	9.0.57.1
WildList detection	99.9%
False positive rate	0.000%
Diversity Test rate	100.00%



Cynet 360

Windows 7 version	8.3.54.102
Windows 10 version	8.3.54.102
WildList detection	99.9%
False positive rate	0.000%
Diversity Test rate	100.00%



Arcabit AntiVirus

Windows 7 version	2019.09.07
Windows 10 version	2019. 09.09
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	100.00%



Defenx Security Suite

Windows 7 version	1.3.0.1
Windows 10 version	1.3.0.1
WildList detection	99.5%
False positive rate	0.001%
Diversity Test rate	100.00%



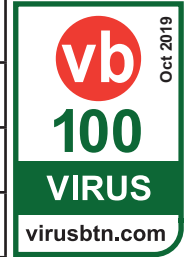
Emsisoft Anti-Malware

Windows 7 version	2019.8.0.9681
Windows 10 version	2019.8.0.9681
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	100.00%



ESET Smart Security Premium

Windows 7 version	12.2.23.0
Windows 10 version	12.2.23.0
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	100.00%



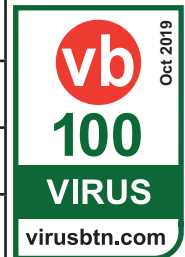
eScan Internet Security Suite for Windows

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	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	100.00%



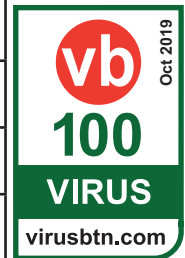
ESET Endpoint Security

Windows 7 version	7.1.2053.0
Windows 10 version	7.1.2053.0
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	100.00%



Exosphere Endpoint Protection

Windows 7 version	8.3.54.90
Windows 10 version	8.3.54.94
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	100.00%



ESET Internet Security

Windows 7 version	12.2.23.0
Windows 10 version	12.2.23.0
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	100.00%



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	99.5%
False positive rate	0.000%
Diversity Test rate	100.00%



IKARUS anti.virus

Windows 7 version	3.1.6
Windows 10 version	3.1.6
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	100.00%



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%



K7 Total Security

Windows 7 version	15.1.0368
Windows 10 version	15.1.0368
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	100.00%



G DATA Antivirus

Windows 7 version	25.5.0.4
Windows 10 version	25.5.0.2
WildList detection	100.0%
False positive rate	0.001%
Diversity Test rate	99.59%



Kaspersky Endpoint Security 11 for Windows

Windows 7 version	11.1.1.126
Windows 10 version	11.1.0.15919
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	99.90%



Heimdal Thor Vigilance

Windows 7 version	2.5.213
Windows 10 version	2.5.222
WildList detection	99.7%
False positive rate	0.000%
Diversity Test rate	100.00%



NANO Antivirus

Windows 7 version	1.0.134.90395
Windows 10 version	1.0.134.90395
WildList detection	100.0%
False positive rate	0.001%
Diversity Test rate	100.00%



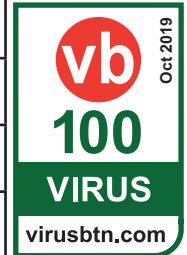
PCProtect

Windows 7 version	4.14.31
Windows 10 version	4.14.31
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	0.003%
Diversity Test rate	100.00%



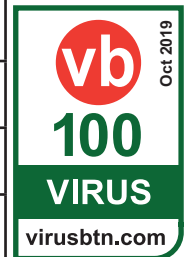
Rising Security Cloud Client

Windows 7 version	3.0.0.90
Windows 10 version	3.0.0.90
WildList detection	100.0%
False positive rate	0.001%
Diversity Test rate	91.16%



TeamViewer Endpoint Protection

Windows 7 version	1.3.195752
Windows 10 version	1.3.195752
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	100.00%



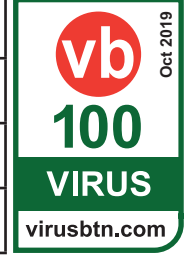
Scanguard

Windows 7 version	4.14.31
Windows 10 version	4.14.31
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	100.00%



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	99.80%



SentinelOne Endpoint Security Platform

Windows 7 version	3.2.4.54
Windows 10 version	3.2.4.54
WildList detection	100.0%
False positive rate	0.002%
Diversity Test rate	100.00%



TotalAV

Windows 7 version	4.14.31
Windows 10 version	4.14.31
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	100.00%



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	100.00%



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%



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	11.0.4.2
Windows 10 version	11.0.4.2
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	100.00%



VirIT eXplorer PRO

Windows 7 version	9.0.21
Windows 10 version	9.0.21
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	69.92%



APPENDIX 1: PRODUCTS NOT CERTIFIED

All participating products achieved VB100 certification in this test.

APPENDIX 2: EXCLUDED PARTS

- For *FireEye Endpoint Security*, the third certification part for both platforms was discarded due to technical issues.
- For *Heimdal Thor Vigilance*, the third certification part for both platforms was discarded due to technical issues.
- For *NANO Antivirus*, the third certification part for both platforms was discarded due to technical issues.

APPENDIX 3: SAMPLE SET SIZES

The WildList contained 1,487 samples. The set of clean files used for the false positive test contained 99,993 files, of which 29,162 were portable executable (PE) files. The set used for the Diversity Test contained 984 samples.

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