



virus

BULLETIN

Covering the global threat landscape

VB100 CERTIFICATION REPORT FEBRUARY 2021

VB Test Team

Anti-malware products don't have an easy job. There are millions of malware samples (many of which are written with the explicit goal of bypassing anti-malware products) to be detected and blocked, while at the same time there are millions of legitimate programs (which occasionally use some of the same techniques as malware) that *mustn't* be blocked. And there are dozens of competing products on the market.

Users should expect anti-malware products to satisfy a minimum standard of blocking malicious executables that have recently been seen in the wild, while blocking few to no legitimate programs.

For more than two decades, Virus Bulletin has set a minimum standard for 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 VB100 certification results of 43 such products from 38 different vendors during January and February 2021.

THE VB100 SET-UP

In the VB100 test, a copy of the product to be tested is installed on *Windows 10*. 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

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

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-ver1-2/>. This test used version 1.2 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.

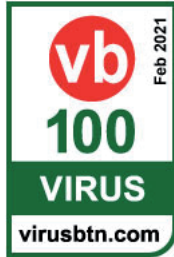
The 'Diversity Test' looks at products' detection of another set of recent malware samples, to acknowledge the fact that products detect malware samples beyond a standard set of samples, and provides a measure of that detection.

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.

Acronis Cyber Protect

Windows 10 version	12.5.23140
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	100.00%



Ad-Spider

Windows 10 version	2021.01.08
WildList detection	99.9%
False positive rate	0.000%
Diversity Test rate	99.20%



Acronis True Image 2021

Windows 10 version	2021 build 35860
WildList detection	99.9%
False positive rate	0.000%
Diversity Test rate	100.00%



AhnLab V3 Endpoint Security

Windows 10 version	9.0.64.11
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	99.90%



Adaware Antivirus Free

Windows 10 version	12.10.60.0
WildList detection	99.9%
False positive rate	0.000%
Diversity Test rate	99.70%



Arcabit AntiVirus

Windows 10 version	2021.01.09
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	99.80%



Adaware Antivirus Pro

Windows 10 version	12.10.60.0
WildList detection	99.9%
False positive rate	0.000%
Diversity Test rate	99.70%



Avast Free Antivirus

Windows 10 version	20.10.2442
WildList detection	99.9%
False positive rate	0.000%
Diversity Test rate	100.00%



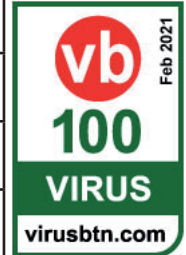
AVG Internet Security

Windows 10 version	20.10.3157
WildList detection	99.9%
False positive rate	0.000%
Diversity Test rate	100.00%



Cynet 360

Windows 10 version	8.3.62.140
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	99.20%



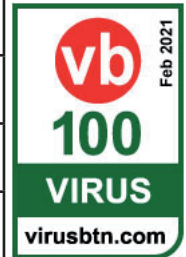
CMC Malware Detection and Defense

Windows 10 version	1.8.2020 build 81
WildList detection	99.7%
False positive rate	0.000%
Diversity Test rate	59.10%



CyRadar Endpoint Detection and Response

Windows 10 version	1.0.0.56
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	97.90%



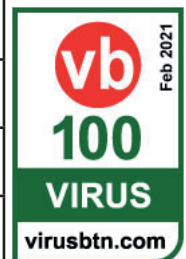
CORE Antivirus

Windows 10 version	1.0.78.0
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	100.00%



Defenx Security Suite

Windows 10 version	1.7.6.0
WildList detection	99.9%
False positive rate	0.000%
Diversity Test rate	99.20%



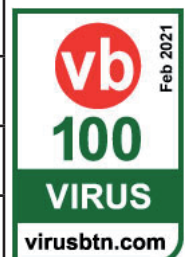
Coronet SecureCloud

Windows 10 version	1.0.762.221
WildList detection	99.9%
False positive rate	0.000%
Diversity Test rate	71.20%



Emsisoft Anti-Malware

Windows 10 version	2021.1.0.10621
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	99.90%



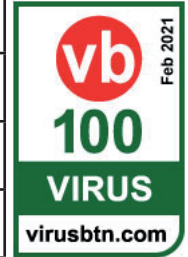
eScan Internet Security Suite for Windows

Windows 10 version	14.0.1400.2228
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	100.00%



FireEye Endpoint Security

Windows 10 version	32.30.13
WildList detection	99.9%
False positive rate	0.000%
Diversity Test rate	99.60%



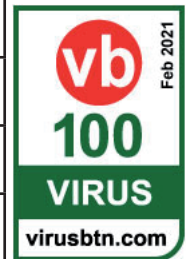
ESTsecurity ALYac

Windows 10 version	4.0.2.23116
WildList detection	99.9%
False positive rate	0.000%
Diversity Test rate	99.70%



Fortinet FortiClient

Windows 10 version	6.2.7.0984
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	99.80%



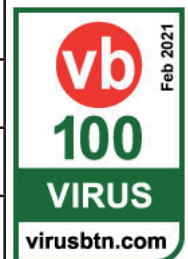
Exosphere Endpoint Protection

Windows 10 version	1.5.22.3
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	100.00%



G DATA Antivirus

Windows 10 version	25.5.8.14
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	99.90%



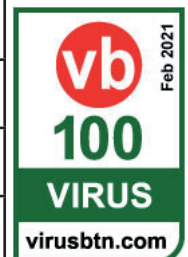
Faronics Anti-Virus

Windows 10 version	4.21.3102.484
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	100.00%



IKARUS anti.virus

Windows 10 version	3.2.4
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	100.00%



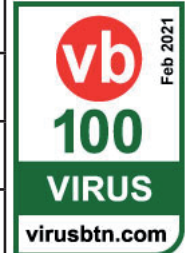
Intego AV

Windows 10 version	1.0.1.7
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	99.80%



Qi-ANXIN Tianqing Endpoint Security Management System

Windows 10 version	6.6.0.4088
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	99.80%



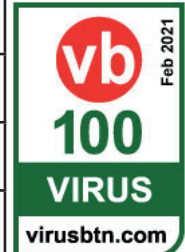
K7 Total Security

Windows 10 version	16.0.0665
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	99.80%



Rising Enterprise Security Management System

Windows 10 version	3.0.0.99
WildList detection	100.0%
False positive rate	0.002%
Diversity Test rate	83.60%



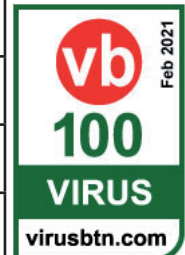
PCProtect

Windows 10 version	5.5.83
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	99.20%



Scanguard

Windows 10 version	5.5.83
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	99.20%



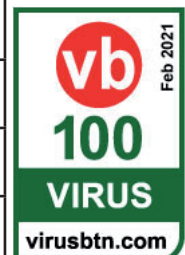
Private Internet Antivirus

Windows 10 version	1.0.1.6
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	100.00%



Shield Antivirus

Windows 10 version	4.7.2
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	99.20%



Systweak Anti-virus

Windows 10 version	1.0.1000.11042
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	100.00%



TotalAV

Windows 10 version	5.5.83
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	100.00%



TACHYON Endpoint Security

Windows 10 version	5.0.1.33
WildList detection	99.9%
False positive rate	0.010%
Diversity Test rate	99.60%



Total Defense Premium

Windows 10 version	12.0.0.306
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	99.90%



TeamViewer Endpoint Protection

Windows 10 version	20.9.1
WildList detection	99.9%
False positive rate	0.000%
Diversity Test rate	99.60%



TUXGUARD Endpoint Protection

Windows 10 version	1.0.1.96
WildList detection	100.0%
False positive rate	0.000%
Diversity Test rate	100.00%



Tencent PC Manager *(see notes in Appendix 2)*

Windows 10 version	12.3.26609.901
WildList detection	99.8%
False positive rate	0.000%
Diversity Test rate	98.00%




United Endpoint Protector


Windows 10 version	1.3
WildList detection	100.0%
False positive rate	0.006%
Diversity Test rate	100.00%



VIPRE Endpoint Cloud Business

Windows 10 version	12.0.7874	
WildList detection	100.0%	
False positive rate	0.000%	
Diversity Test rate	100.00%	

VirIT eXplorer PRO

Windows 10 version	9.3.44	
WildList detection	100.0%	
False positive rate	0.000%	
Diversity Test rate	39.10%	

APPENDIX 1: PRODUCTS NOT CERTIFIED

SecureAge SecureAPlus Pro didn't achieve VB100 certification in this test.

APPENDIX 2: TESTING NOTES

- Due to technical failure one test part was invalidated for *Tencent PC Manager*.

APPENDIX 3: SAMPLE SET SIZES

The Certification Set contained 1,384 malicious samples. The set of clean samples used for the false positive test contained 100,000 files, of which 27,102 were portable executable (PE) files. The set used for the Diversity Test contained 1,000 malicious samples.

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