

virus

BULLETIN

Covering the global threat landscape

VB100 CERTIFICATION REPORT FEBRUARY 2020

VB Test Team

The VB100 award remains as relevant now as it was at its inception 22 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 results of 40 such products from 36 different vendors during January and February 2020.

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.

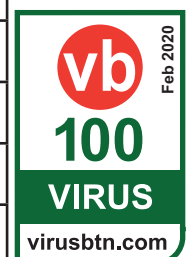
The 'Diversity Test' looks at products' detection of another set of recent malware samples, to acknowledge the fact that products detect malware samples beyond a standard set of samples, and provides a measure of that detection.

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.

Adaware Antivirus Free

| | |
|----------------------------|-------------|
| Windows 7 version | 12.7.1055.0 |
| Windows 10 version | 12.7.1055.0 |
| WildList detection | 100.0% |
| False positive rate | 0.000% |
| Diversity Test rate | 99.29% |



Adaware Antivirus Pro

| | |
|---------------------|-------------|
| Windows 7 version | 12.7.1055.0 |
| Windows 10 version | 12.7.1055.0 |
| WildList detection | 100.0% |
| False positive rate | 0.000% |
| Diversity Test rate | 99.29% |



Avast Free Antivirus

| | |
|---------------------|-----------|
| Windows 7 version | 19.8.2393 |
| Windows 10 version | 19.8.2393 |
| WildList detection | 100.0% |
| False positive rate | 0.000% |
| Diversity Test rate | 100.00% |



Ad-Spider

| | |
|---------------------|--------------------|
| Windows 7 version | 2020.01.13-7.83468 |
| Windows 10 version | 2020.01.10-7.83433 |
| WildList detection | 100.0% |
| False positive rate | 0.000% |
| Diversity Test rate | 99.29% |



AVG Internet Security

| | |
|---------------------|-----------|
| Windows 7 version | 19.8.3108 |
| Windows 10 version | 19.8.3108 |
| WildList detection | 100.0% |
| False positive rate | 0.000% |
| Diversity Test rate | 100.00% |



AhnLab V3 Internet Security 9.0

| | |
|---------------------|----------|
| Windows 7 version | 9.0.60.1 |
| Windows 10 version | 9.0.60.1 |
| WildList detection | 100.0% |
| False positive rate | 0.000% |
| Diversity Test rate | 100.00% |



BitSentry Elite

| | |
|---------------------|-----------|
| Windows 7 version | 1.0.5.170 |
| Windows 10 version | 1.0.5.170 |
| WildList detection | 100.0% |
| False positive rate | 0.000% |
| Diversity Test rate | 99.29% |



Arcabit AntiVirus

| | |
|---------------------|------------|
| Windows 7 version | 2020.01.11 |
| Windows 10 version | 2020.01.11 |
| WildList detection | 100.0% |
| False positive rate | 0.000% |
| Diversity Test rate | 99.29% |



Cynet 360

| | |
|---------------------|------------|
| Windows 7 version | 8.3.54.150 |
| Windows 10 version | 8.3.54.150 |
| WildList detection | 99.9% |
| False positive rate | 0.000% |
| Diversity Test rate | 98.17% |



Defenx Security Suite

| | |
|---------------------|----------|
| Windows 7 version | 1.5.0.19 |
| Windows 10 version | 1.5.0.19 |
| WildList detection | 99.7% |
| False positive rate | 0.000% |
| Diversity Test rate | 98.27% |



ESET Internet Security

| | |
|---------------------|-----------|
| Windows 7 version | 13.0.24.0 |
| Windows 10 version | 13.0.24.0 |
| WildList detection | 100.0% |
| False positive rate | 0.000% |
| Diversity Test rate | 100.00% |



Emsisoft Anti-Malware

| | |
|---------------------|---------------|
| Windows 7 version | 2020.1.0.9926 |
| Windows 10 version | 2020.1.0.9926 |
| WildList detection | 99.8% |
| False positive rate | 0.000% |
| Diversity Test rate | 100.00% |



ESET Smart Security Premium

| | |
|---------------------|-----------|
| Windows 7 version | 13.0.24.0 |
| Windows 10 version | 13.0.24.0 |
| WildList detection | 100.0% |
| False positive rate | 0.000% |
| Diversity Test rate | 100.00% |



eScan Internet Security Suite for Windows

| | |
|---------------------|----------------|
| Windows 7 version | 14.0.1400.2175 |
| Windows 10 version | 14.0.1400.2175 |
| 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 | 99.29% |



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 | 8.3.54.158 |
| Windows 10 version | 8.3.54.154 |
| WildList detection | 100.0% |
| False positive rate | 0.000% |
| Diversity Test rate | 99.90% |



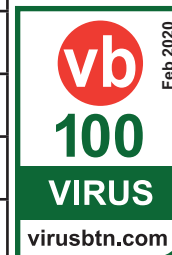
Faronics Anti-Virus

| | |
|---------------------|---------------|
| Windows 7 version | 4.21.3102.484 |
| Windows 10 version | 4.21.3102.484 |
| WildList detection | 100.0% |
| False positive rate | 0.000% |
| Diversity Test rate | 100.00% |



Heimdal Thor Vigilance

| | |
|---------------------|---------|
| Windows 7 version | 2.5.223 |
| Windows 10 version | 2.5.223 |
| WildList detection | 99.7% |
| False positive rate | 0.000% |
| Diversity Test rate | 98.06% |



FireEye Endpoint Security

| | |
|---------------------|---------|
| Windows 7 version | 31.28.1 |
| Windows 10 version | 31.28.1 |
| WildList detection | 100.0% |
| False positive rate | 0.000% |
| Diversity Test rate | 99.29% |



IKARUS anti.virus

| | |
|---------------------|---------|
| Windows 7 version | 3.1.16 |
| Windows 10 version | 3.1.16 |
| WildList detection | 100.0% |
| False positive rate | 0.000% |
| Diversity Test rate | 100.00% |



Fortinet FortiClient

| | |
|---------------------|------------|
| Windows 7 version | 6.2.3.0912 |
| Windows 10 version | 6.2.3.0912 |
| WildList detection | 100.0% |
| False positive rate | 0.000% |
| Diversity Test rate | 100.00% |



Intego AV

| | |
|---------------------|----------|
| Windows 7 version | 1.0.0.13 |
| Windows 10 version | 1.0.0.13 |
| WildList detection | 100.0% |
| False positive rate | 0.000% |
| Diversity Test rate | 99.59% |



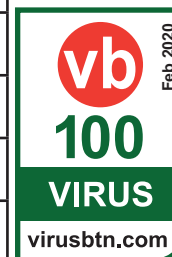
G DATA Antivirus

| | |
|---------------------|-----------|
| Windows 7 version | 25.5.5.43 |
| Windows 10 version | 25.5.5.43 |
| WildList detection | 100.0% |
| False positive rate | 0.000% |
| Diversity Test rate | 100.00% |



ITL Total Security

| | |
|---------------------|----------|
| Windows 7 version | 1.0.0.13 |
| Windows 10 version | 1.0.0.13 |
| WildList detection | 99.9% |
| False positive rate | 0.000% |
| Diversity Test rate | 98.27% |



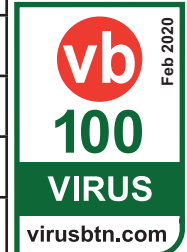
K7 Total Security

| | |
|---------------------|-----------|
| Windows 7 version | 16.0.0128 |
| Windows 10 version | 16.0.0128 |
| WildList detection | 100.0% |
| False positive rate | 0.000% |
| Diversity Test rate | 100.00% |



Rising Enterprise Security Management System

| | |
|---------------------|----------|
| Windows 7 version | 3.0.0.95 |
| Windows 10 version | 3.0.0.93 |
| WildList detection | 100.0% |
| False positive rate | 0.000% |
| Diversity Test rate | 60.27% |



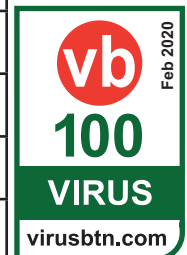
Kaspersky Endpoint Security 11 for Windows

| | |
|---------------------|------------|
| Windows 7 version | 11.1.1.126 |
| Windows 10 version | 11.1.1.126 |
| WildList detection | 100.0% |
| False positive rate | 0.000% |
| Diversity Test rate | 99.80% |



Scanguard

| | |
|---------------------|---------|
| Windows 7 version | 4.14.31 |
| Windows 10 version | 4.14.31 |
| WildList detection | 99.9% |
| False positive rate | 0.000% |
| Diversity Test rate | 98.17% |



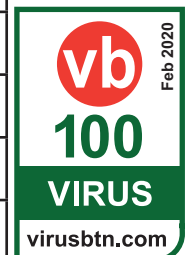
NANO Antivirus

| | |
|---------------------|---------------|
| Windows 7 version | 1.0.134.90567 |
| Windows 10 version | 1.0.134.90567 |
| WildList detection | 100.0% |
| False positive rate | 0.000% |
| Diversity Test rate | 83.15% |



Systweak Anti-virus

| | |
|---------------------|---------------|
| Windows 7 version | 1.0.1000.9560 |
| Windows 10 version | 1.0.1000.9560 |
| WildList detection | 100.0% |
| False positive rate | 0.000% |
| Diversity Test rate | 99.59% |



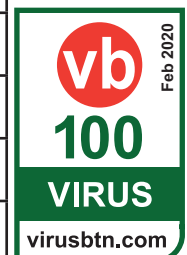
PCProtect

| | |
|---------------------|---------|
| Windows 7 version | 4.14.31 |
| Windows 10 version | 4.14.31 |
| WildList detection | 99.9% |
| False positive rate | 0.000% |
| Diversity Test rate | 98.17% |



TACHYON Endpoint Security

| | |
|---------------------|----------|
| Windows 7 version | 5.0.0.57 |
| Windows 10 version | 5.0.0.57 |
| WildList detection | 100.0% |
| False positive rate | 0.000% |
| Diversity Test rate | 100.00% |



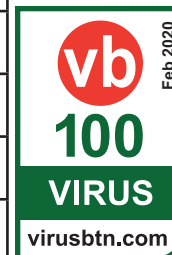
TeamViewer Endpoint Protection

| | |
|---------------------|------------|
| Windows 7 version | 1.4.225047 |
| Windows 10 version | 1.4.225047 |
| WildList detection | 100.0% |
| False positive rate | 0.000% |
| Diversity Test rate | 99.29% |



VIPRE Endpoint Cloud Business

| | |
|---------------------|-----------|
| Windows 7 version | 11.0.7633 |
| Windows 10 version | 11.0.7633 |
| WildList detection | 100.0% |
| False positive rate | 0.000% |
| Diversity Test rate | 99.29% |



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 | 100.00% |



VirIT eXplorer PRO

| | |
|---------------------|--------|
| Windows 7 version | 9.0.95 |
| Windows 10 version | 9.0.94 |
| WildList detection | 100.0% |
| False positive rate | 0.000% |
| Diversity Test rate | 63.13% |



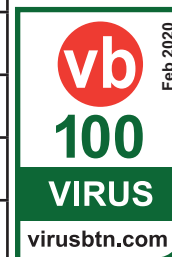
TotalAV

| | |
|---------------------|--------|
| Windows 7 version | 5.4.24 |
| Windows 10 version | 5.4.24 |
| WildList detection | 100.0% |
| False positive rate | 0.000% |
| Diversity Test rate | 99.69% |



Wontok SafeCentral Security Suite

| | |
|---------------------|----------|
| Windows 7 version | 2.0.1653 |
| Windows 10 version | 2.0.1653 |
| WildList detection | 100.0% |
| False positive rate | 0.000% |
| Diversity Test rate | 99.59% |



Total Defense Premium

| | |
|---------------------|------------|
| Windows 7 version | 12.0.0.243 |
| Windows 10 version | 12.0.0.243 |
| WildList detection | 100.0% |
| False positive rate | 0.000% |
| Diversity Test rate | 99.29% |



APPENDIX 1: PRODUCTS NOT CERTIFIED

There were two products that failed to achieve VB100 certification in this test: *Cyren Command Anti-Malware* and *SecureAge Plus Pro*.

APPENDIX 2: TESTING NOTES

BitSentry Elite had eight missed detections in the Diversity set. The product's developers provided new product settings during the dispute period. Using the new settings the samples that were missed in the test would have been

detected. However, the VB100 rules dictate that, since the data collection period had already ended, the results could not be changed in the final VB100 report. The amended settings will be used in future tests.

APPENDIX 3: SAMPLE SET SIZES

The WildList (certification) set contained 2,948 malicious samples. The set of clean samples used for the false positive test contained 100,000 files, of which 29,228 were portable executable (PE) files. The set used for the Diversity Test contained 981 malicious samples.

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