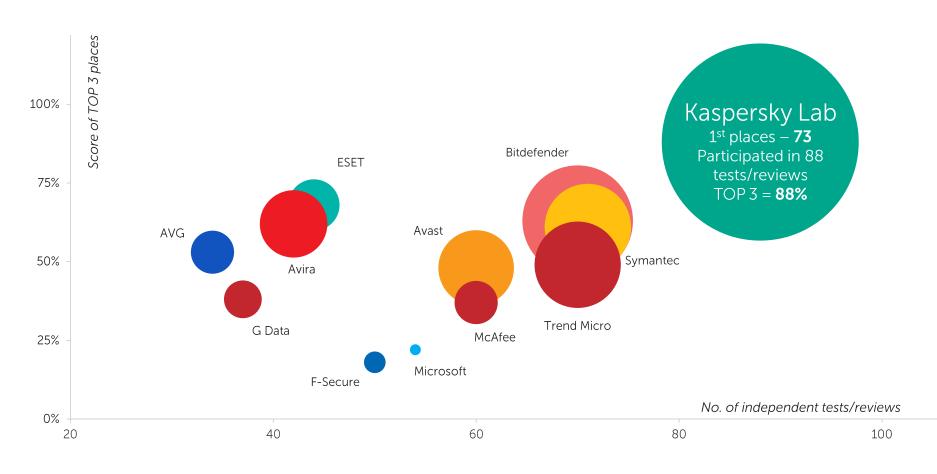
MOST TESTED. MOST AWARDED. KASPERSKY LAB PROTECTION.*

In 2018 Kaspersky Lab products participated in 88 independent tests and reviews. Our products were awarded 73 firsts and received 77 top-three finishes.





*kaspersky.com/top3

* Notes:

- According to summary results of independent tests in 2018 for corporate, consumer and mobile products.
- Summary includes independent tests conducted by: AV-Comparatives, AV-Test, SE Labs, MRG Effitas, Virus Bulletin, ICSA Labs, NSS Labs, PCSL.
- Tests performed in these programs assess all protection technologies against known, unknown and advanced threats.
- \bullet The size of the bubble reflects the number of $1^{\rm st}$ places achieved.

TOP3 metric reflects the percentage of times a vendor gained a top-three place in independent tests within a reported period (calendar year).

Among the security vendors participating in the TOP3 measurements are: Avast, AVG, Avira, Bitdefender, ESET, F-Secure, G DATA, McAfee, Kaspersky Lab, Microsoft, Symantec and Trend Micro. A complete list of participating vendors appears at the end of this document.

Only those who participate in 35% or more of the tests have their results represented in the chart.

Participation in any test affects two counters for each vendor: TOP3 and Participation.

- 1. Every time a vendor ranks in the first three places or wins an award in a test, a TOP3 counter is awarded incrementally. Counters are not increased for placing outside the top three. In cases where several vendors share the same place in a test, the next vendor's place is calculated as "number of higher ranked vendors + 1". For instance, 1,2,2,4 is possible, but 1,2,2,3 is not. This means that in the sequence "1,2,2,4" only the three first vendors get their TOP3 counters incremented. There is an exception for tests with 'levels' as a final result. In this case, several vendors can receive 'Level1', 'Level2', etc., with the three first levels incrementing the vendor's Participation counter in the TOP3. Individual products can independently and separately increment a vendor's TOP3 counter.
- 2. A vendor's Participation counter is incremented each time one of its products participates in a test/review/overview (regardless of the final result).

The final result (TOP3 score) is calculated by dividing the number of TOP3 counters by the number of vendor's participation counters to give an overall percentage placement.

The deadline for submitting scores attained in 2018 was February, 1st 2019, with no option to add any test/review after this date.

	No of tests entered	No of TOP3 places	Score of TOP3 places (%)	No of 1 st places
Kaspersky Lab	88	77	88%	73
ESET	44	30	68%	19
Bitdefender	70	44	63%	41
Avira	42	26	62%	25
Symantec	71	43	61%	32
AVG	34	18	53%	16
Trend Micro	70	34	49%	32
Avast	60	29	48%	28
G DATA	37	14	38%	14
McAfee	60	22	37%	16
Microsoft	54	12	22%	4
F-Secure	50	9	18%	8

These tests were performed against various types of malware, including advanced threats as well as false positives.

Specialized threats

Ransomware

- MRG Effitas. 360 Degree Assessment & Certification
- SE Labs. Enterprise Endpoint Protection Test
- SE Labs. Home Anti-Malware Protection Test
- SE Labs. Small Business Endpoint Protection Test
- AV-TEST. Bi-Monthly Certification: Consumer and Business
- AV-Comparatives. Whole Product Dynamic "Real-World" Test
- AV-Comparatives. Malware Protection Test

Exploits

- SE Labs. Enterprise Endpoint Protection Test
- SE Labs. Home Anti-Malware Protection Test
- SE Labs. Small Business Endpoint Protection Test
- MRG Effitas. 360 Degree Assessment & Certification
- MRG Effitas. Exploit And Post-Exploit Protection Test
- NSS Labs. Advanced Endpoint Protection Test

Financial malware

- MRG Effitas. Online Banking/Browser Security Certification
- MRG Effitas. 360 Degree Assessment & Certification

APT

• ICSA Labs. Advanced Threat Detection Certification

Phishing

• AV-Comparatives. Anti-Phishing Test

Dedicated tests

Android tests

- AV-Comparatives. Mobile Security Review
- AV-Comparatives. Android Test
- AV-TEST. Android Mobile Security Products Test
- PCSL. Mobile Security Product Test for Android

Mac tests

- AV-Comparatives. Mac Security Test & Review
- AV-TEST. Mac Detection & Performance Test

Remediation tests

- AV-Comparatives. Malware Removal Test
- AV-TEST. Remediation Product Test

Email protection

• SE Labs. Email Security Services Protection

Real-world tests

- AV-Comparatives. Whole Product Dynamic "Real-World" Protection Test
- AV-TEST Bi-Monthly Certification Consumer and Business
- SE Labs. Enterprise Endpoint Protection Test
- SE Labs. Home Anti-Malware Protection Test
- SE Labs. Small Business Endpoint Protection Test
- MRG Effitas. Comparative Malware Protection Assessment

Tests on a static collection

 Virus Bulletin. VB100 Comparative Review and Certification

False positives (FP)

All the tests mentioned above include FP measurements.



The following tests were performed in 2018 and used to calculate the metric:

AV-Comparatives

Product of the Year

This award is given to the vendor who attained the highest awards in an entire year's testing cycle, involving the following tests: Malware Protection Test (MPT, a successor of Online File Detection Test with added files execution) + Whole Product Dynamic Test (WPDT) + Malware Removal Test + Performance Test. According to AV-Comparatives' rules, in cases where two or more vendors receive the same maximum score, the award goes to the vendor who has never received it before, or was the last of the participants to receive it previously. The seal is counted as a first place in the TOP3 metric.

Vendors who were nominated, but did not receive the 'Product of the Year' award, are given the 'Outstanding Product' rank, which counts as a second place in TOP3 metrics.

Vendors who achieved at least 90 points across the entire test cycle are awarded the 'Top Rated' rank, which counts as a third place in the TOP3 metric. Vendors that fail to score any points in at least one of the tests are excluded.

At the end of the year, medals ('Gold', 'Silver', 'Bronze') are given for the best results in specific tests: FDT, WPDT, Performance, Malware Removal. As these results have already contributed to overall TOP3 metrics; the medals themselves do not count towards it.

Since 2015, only awards can contribute towards TOP3 counters in AV-Comparatives tests.

• Malware Protection Test

This test is an enhancement of the File Detection Test and includes execution of the files. The test consists of two parts: Detection Rate and False Positives. Products receive the following awards: "Advanced+", "Advanced", "Standard" or "Tested".

Only products with "Advanced+" gain an increment of TOP3 counters for their vendor.

WPDT (Whole Product Dynamic "Real-World" Protection Test)

The test lasts for five months using mainly current, visible, and relevant malicious websites/malware. Because all product components contribute a significant role in overall protection, results achieved in this category are a good indicator of anti-malware product efficiency in real-world scenarios.

Products receive the following awards: "Advanced+", "Advanced", "Standard" or "Tested". Only products with "Advanced+" gain an increment of TOP3 counters for their vendor.

Anti-Phishing Test

This test simulates a common situation: users rely on the anti-phishing protection provided by their security products while browsing the web.

Only certified products gain an increment of TOP3 counters for their vendor.

Android Test

This test evaluates the protection capabilities of mobile security applications for Android.

Products achieving the highest three places, based on Protection Rate and False Positives, gain an increment of TOP3 counters for their vendor.

Mobile Security Review

This review includes a malware protection test along with an overview of additional features (theft protection, battery consumption, etc.).

Products achieving the highest three places, based on Protection Rate and False Positives, gain an increment of TOP3 counters for their vendor.

• Mac Security Test & Review

This review evaluates various Mac protection products against a product feature list and measures protection levels in categories such as Detection Rate on separate Mac- & Windows-related malware sets and a False Positive level.

Products placing in the highest three positions based on Protection Rate gain an increment of TOP3 counters for their vendor.

Malware Removal Test

This nine-month-long test focuses on the malware removal/cleaning capabilities of security products, assessing their ability to disinfect a system successfully, i.e. to remove malware and its leftovers from an already infected/compromised system.

Products receive the following awards: "Advanced+", "Advanced", "Standard" or "Tested". Only products with "Advanced+" gain an increment of TOP3 counters for their vendor.

• Business Security Test

This test evaluates the protection efficiency of various business security products, as well as the ones which call themselves 'next gen' solutions, in categories such as Detection Rate on different malware sets, websites, and exploits and a False Positive level.

Products achieving at least 90 percent Detection Rate with no False Positives on common business software in the Malware Protection Test and at least 90 percent Detection Rate with less than 100 False Positives on any clean software/websites in the overall Real-World Protection Test, with no major performance issues, are certified by the test lab, and gain an increment of TOP3 counters for their vendor.

Parental Control Certification

The test evaluates the protection efficiency of security products in preventing children from visiting unwanted web sites.

Only certified products gain an increment of TOP3 counters for their vendor.



AV-Test

Best Protection Award Consumer and Business

This award is given for perfect results in the Protection category over the course of an entire year, during which bi-monthly certification takes place. Consumer and Business related products are assessed separately.

Only products that receive this award gain a TOP3 counter increment for their vendor.

Best Performance Award Consumer and Business

This award is given for perfect results in the Performance category over the course of an entire year, during which bi-monthly certification takes place. Consumer and Business related products are assessed separately.

Only products that receive this award gain a TOP3 counter increment for their vendor.

Best Usability Award Consumer and Business

This award is given for perfect results in the Usability category over the course of an entire year, during which bi-monthly certification takes place. Consumer and Business related products are assessed separately.

Only products that receive this award gain a TOP3 counter increment for their vendor.

• Best Repair Award

This award is given for perfect results in the Repair category over the course of an entire year, for integrated and dedicated Consumer products separately.

Only products that receive this award gain a TOP3 counter increment for their vendor.

Best Android Security

This award is given for perfect results in the Android security testing over the course of a whole year.

Only products that receive this award gain a TOP3 counter increment for their vendor.

• Bi-Monthly Certification: Consumer and Business

This year-long certification series consists of Consumer and Business segments, each divided into six separate, two-month-long tests. All participating products are evaluated and receive points in Protection, Performance and Usability categories. The sum of the points gained in each category makes up the overall score; products in the top three have their TOP3 counters incremented.

Android Mobile Security Products Test

This year-long certification series is divided into six separate, month-long tests. All participating products are evaluated and receive points in categories of Protection, Usability (combined results in Performance and False Positives) and Features.

The sum of the points gained in each category makes up the overall score; products in the top three have their TOP3 counters incremented.

• Parental Control Test for Android, iOS & Windows

This test evaluates the efficiency of security products in preventing children from visiting unwanted web sites. Only certified products gain an increment of TOP3 counters for their vendor.

Mac Detection & Performance Test Consumer and Business

This test evaluates various security protection products for Mac OS X. Consumer and Business related products are assessed separately. All participating products receive points in Protection, Performance and Usability categories. The sum of the points gained in each category makes up the overall score; products in the top three have their TOP3 counters incremented.

Only products that receive this award gain a TOP3 counter increment for their vendor

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SE Labs (formerly known as Dennis Technology Labs)

- Enterprise Endpoint Protection Test
- Home Anti-Malware Protection Test
- Small Business Anti-Virus Protection Test

These quarterly-long tests aim to compare the effectiveness of antimalware products provided by well-known security companies. The products are exposed to live Internet threats during the test period. This exposure is carried out in a very realistic way, closely reflecting the customer experience. The results reflect how products perform under real-life, customer-use-case scenarios, i.e. what happens when a user visits an infected website. The tests include a detection subtest and a false positive one.

Three products with the highest Total Accuracy Rating scores (calculated as a combination of points of the two subsets) gain an increment of TOP3 counters for their vendor.

• Email Security Services Protection

This test evaluates how effectively the email security services provided by the participating vendors are at detecting and/or protecting against threats in real time. The tests include a detection subtest and a false positive one.

Three products with the highest Total Accuracy Rating scores (calculated as a combination of points of the two subsets) gain an increment of TOP3 counters for their vendor.

MRG Effitas

• Online Banking/Browser Security Certification

This test assesses the efficiency of products against financial malware by implementing different test methodologies and scenarios: 'In The Wild' real financial malware sets, botnet environments, and simulations of different sensitive data interception techniques. Only products that successfully pass the first two steps receive certification and gain a TOP3 counter increment for their yendor.

• 360 Assessment & Certification

This test evaluates both the ability to block initial infection and time taken to detect and remediate malware on a compromised system. This test replaces the older "Time to Detect & Remediate Assessment" test. Only certified products gain an increment of TOP3 counters for their vendor.

• Comparative Malware Protection Assessment

This vendor-commissioned test evaluates the ability of enterprise products to detect executable malware. Based on Detection Rate, products that achieve the highest three places gain an increment of TOP3 counters for their vendor.

Exploit And Post-Exploit Protection Test

This vendor-commissioned test evaluates the products antiexploit and anti-post-exploit features in isolation. Based on the Protection score, products that achieve the highest three places gain an increment of TOP3 counters for their vendor.

Virus Bulletin

VB100 Comparative Review and Certification

These tests are held every two months on operating systems Win7 and Win10 in parallel to evaluate different types of products.

Each product that passes the certification gains an increment of TOP3 counter for their vendor.

VBWeb Comparative Review

This test measure the ability of participating gateway level products to prevent malicious traffic such as malicious executables and drive-by downloads from infecting an organization's network.

Each product that passes the certification gains an increment of TOP3 counter for their vendor.

ICSA Labs

Advanced Threat Defense Certification

This assessment aims to evaluate the efficiency of security solutions to detect new and little-known threats while minimizing false positives.

Each product that passes the certification gains an increment of TOP3 counter for their vendor.

NSS Labs

Advanced Endpoint Protection test v.2

This test evaluates Advanced Endpoint Protection solutions (AEP) on security effectiveness and total cost of ownership.

PCSL (PC Security Labs)

Mobile Security Product Test for Android¹

This test evaluates Detection Rate and False Positives of mobile products.

Products achieving the highest three Final scores, based on Detection Rate and False Positives, gain an increment of TOP3 counters for their vendor.

 1 Results for the third and fourth quarters were not taken into account in the TOP3 metrics as they had not been published by the database freeze deadline.



- 1E
- 7Labs
- AegisLab
- AhnLab
- Alibaba
- Amazon
- Antiy Labs
- Apple
- ArcaBit,
- Avast
- AVG
- Avira
- Baidu
- BaiSi
- BangStudio
- Barracuda
- Bastiv
- Best Tools Pro Cleaner
- Bitdefender
- BitMedic
- Bornaria

- BullGuard
- Carbon Black
- Check Point
- Cheetah Mobile
- Chili Security
- Cisco
- Comodo
- CompuClever
- Counter Tack
- CrowdStrike
- Cylance
- CYREN
- Defenx
- DevStudio 99
- Dr.Web
- EmsiSoft
- Endgame
- Ensilo
- •eScan
- ESET
- ESTsoft

- Exosphere
- Faronics
- Fast Track
- FireEye
- Forcepoint
- Fortinet
- F-Secure
- G DATA
- GearMedia
- GizmoLife
- Google
- Hammock
- Heise
- Hi Dev Team
- Hi Security Lab
- High Security Team
- Himlamo
- HitmanPro
- Hyper Speed
- Ikarus
- INetCop

- Intego
- IntelliAV
- Juniper
- JusProg
- K7 Computing
- Kaspersky Lab
- Kiddoware
- Lavasoft
- LBE Security
- Lookout Mobile Security
- MalwareBytes
- Max Mobi Secure
- McAfee
- Microsoft
- Microworld
- Mimecast
- MINUSOFT
- MMGuardian
- Mobicip
- MobiDev Studio
- MobileAppDev

- NANO
- Net Nanny
- NEWAPPSDEV
- Newborntown
- NightCorp
- NQ mobile
- NSHC
- Nyotron Security
- ONE App Limited
- Palo Alto
- Panda
- Panzor
- PC Pitstop
- PCKeeper
- PCVARK
- Photo Editor Creative Cleaner
- PICOO Design
- Power Tools Team
- Product A
- Proofpoint
- Psafe

- Qihoo 360
- Quick Heal
- Qustodio
- REVE
- Rising
- SafeDNS
- Saint
- Security Apps Studio
- Security Cleaner
 Team
- Security Elite
- Security Mobile
- Security Safe Protect Team
- SentinelOne
- Segrite
- Sophos
- Symantec
- TeamViewer
- Tencent
- •TGSoft
- ToolsDevelope

- Total Defense
- TotalAV
- Trend Micro
- TrustGo
- Trustlook
- TrustPort
- Trustwave
- VIPRE
- Vitekco K
- Wantagetech
 Solutions
- Watchdog
- Webroot
- Wecool
- WhiteArmor
- Wontok
- Z Lock Screen Team
- ZemanaZoner

