IT Security Survey 2015

Overview

Use of the Internet by home and business users continues to grow in all parts of the world. How users access the Internet is changing, though. There has been increased usage of smartphones by users to access the Internet. The tablet market has taken off as well. This has resulted in a drop in desktop and laptop sales. With regard to attacks by cyber criminals, this means that their focus has evolved.

This is our fifth[1] annual survey of computer users worldwide. Its focus is which security products (free and paid) are employed by users, OS usage, and browser usage. We also asked respondents to rank what they are looking for in their security solutions.

Survey methodology

Report results are based on an Internet survey run by AV-Comparatives between 15th December 2014 and 15th January 2015. A total of 6,422 computer users from around the world anonymously answered the questions on the subject of computers and security.

Key Results

- Among respondents, the four most important aspects of a security protection product were (1) Low impact on system performance (2) Good detection rate without using the cloud (3) Good proactive protection without using the cloud (4) Good malware removal and cleaning capabilities.

- Avast is the most popular mobile security solution worldwide, while Kaspersky Lab makes the top four on every continent with significant results.

- Kaspersky Lab and ESET are the two most popular desktop security products worldwide, and feature in the top four products on every continent with significant results.

- The share of Android as the mobile OS has increased slightly since last year, and is now used by nearly three quarters of respondents. Apple's iOS is the only other mobile OS to reach double figures, at just over 13%.

- A majority of users (over three quarters) were well protected in the last 6 months; only a minority reported that their security product had failed to protect them against malware infection in this period. Over a third (35%) stated that their security product had blocked malware within the last week, indicating how easy it is to encounter a threat.

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[1] http://www.av-comparatives.org/security-usage-surveys/

Conclusions

- The number of users who rely on free desktop security software has fallen this year to little more than a third (35.9%). Around 5% do not use any security solution, meaning that almost 60% of respondents pay for protection.

- As expected, the number of Windows users who run Windows 7 or 8/8.1 has increased, from about 75% last year to over 90% this year. This may well be due to the fact that Microsoft ceased providing any support for Windows XP in 2014.

- Google Chrome is now the most popular browser with 40%, a 4% lead over Mozilla Firefox. The use of Internet Explorer has declined by a couple of percentage points since last year, and is now at just over 11%.

- As regards trustworthiness of reviews, forum and YouTube reviews both scored less than 2.5 out of 5, whilst all the computer magazines/websites/institutes achieved scores between 3 and 4.

- There is a wide range of views as to the fifteen test labs we asked users about. We are pleased (and humbled) by our top score of 4.7.

We are grateful to everyone who completed the survey, and for respondents' trust in AV-Comparatives. The feedback we have gained will be used to ensure that our tests continue to grow in effectiveness and relevance. This enables manufacturers to further improve their products, benefitting both themselves and their users. We are seeing our test results quoted by other publications in their review of AV and Internet Security products!

All AV-Comparatives' public test results are available to everyone at no charge at www.av-comparatives.org

- 4 -

Security Survey 2015

We conducted our annual survey to improve our service to the end-user community. Respondents were asked for their opinions on various topics related to anti-virus software testing and anti-virus software in general. The results were invaluable to us. We would like to thank everyone who took the time to complete the survey.

Key data

Survey Period: **15th December 2014 - 15th January 2015**

Valid responses of real users: **6,422**

The survey contained some control questions and checks. This allowed us to filter out invalid responses and users who tried to distort the results by e.g. giving impossible/conflicting answers. We were primarily interested in the opinions of everyday users. The survey results in this public report do not take into account the responses of participants who are involved with anti-virus companies.
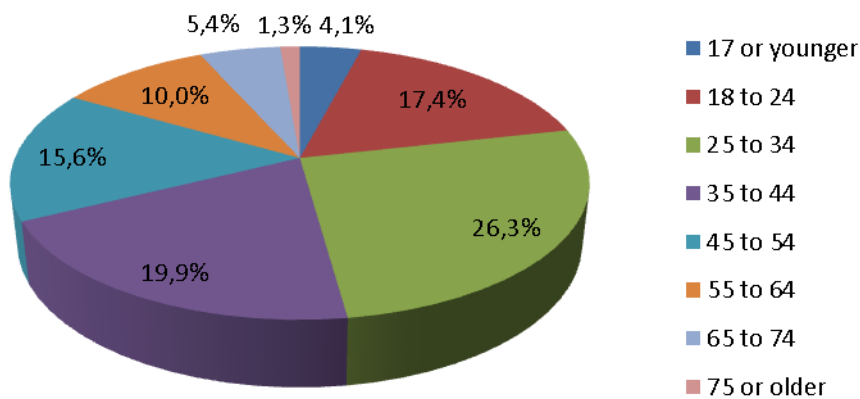
The survey results are invaluable to us. This report contains the results of the survey questions.

1. Where are you from?
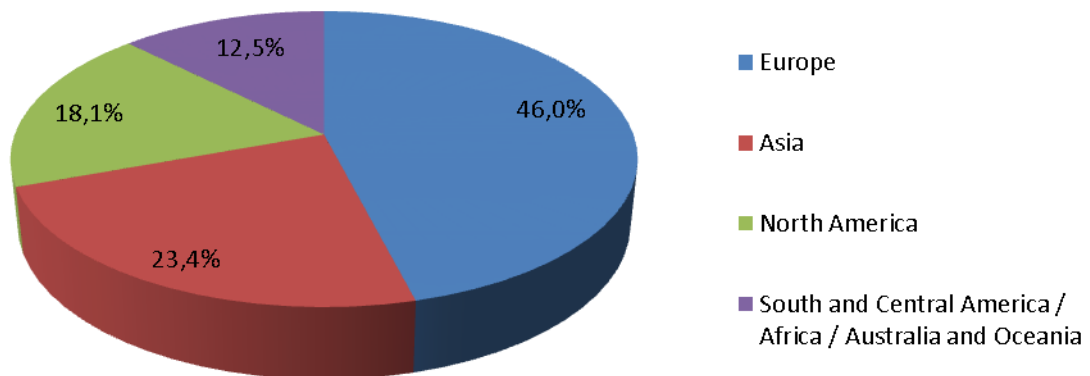
Almost half the respondents were from Europe, just under a quarter from Asia, and almost a fifth from North America.

2. What is your age?

Age distribution for each continent were as follows. Asia had the youngest respondents, with almost 75% in the 18 to 24 and 25 to 34 brackets, followed by South America/Australia/Africa, where 54% fell into one of these groups. North America had the oldest respondents, 53.2% being in the 45 to 54 or 55 to 64 groups. Europe came in the middle, with 49.3% in the 25 to 34 or 35 to 44 groups.

3. Which desktop operating system do you primarily use?
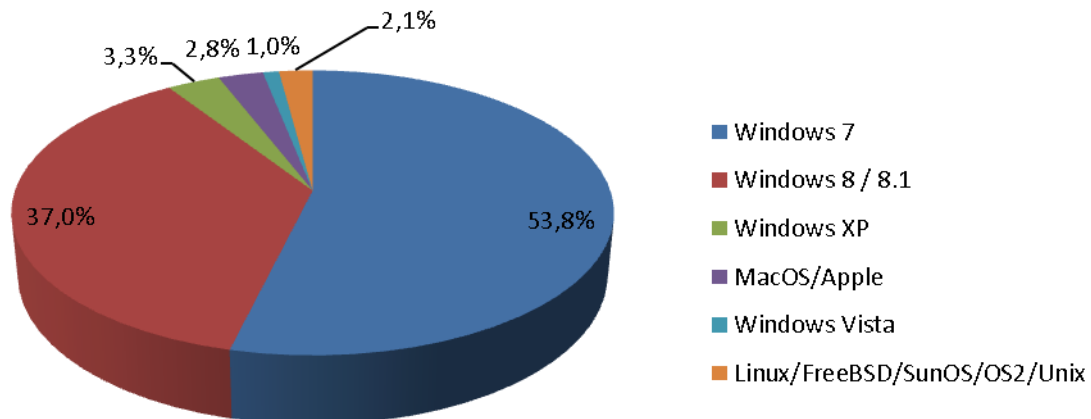
This year, there were no regional differences with regard to the order of popularity of different desktop operating systems.

53.8% use Windows 7. A further 37.0% of respondents use Windows 8/8.1. As was the case last year, Microsoft's current OS is more popular among our survey respondents than with the general public, according to figures provided by various metrics companies. 3.3% of our respondents still use Windows XP, which is lower than for the general public. Although Microsoft stopped all support for XP in April 2014, some AV vendors will doubtless provide XP-compatible solutions for several more years, due to its continued use. However, we recommend readers running XP to upgrade to a newer version of Windows. We note that there are reliable programs[2] that put back the Start Menu in Windows 8, and Windows 10 is expected later this year.
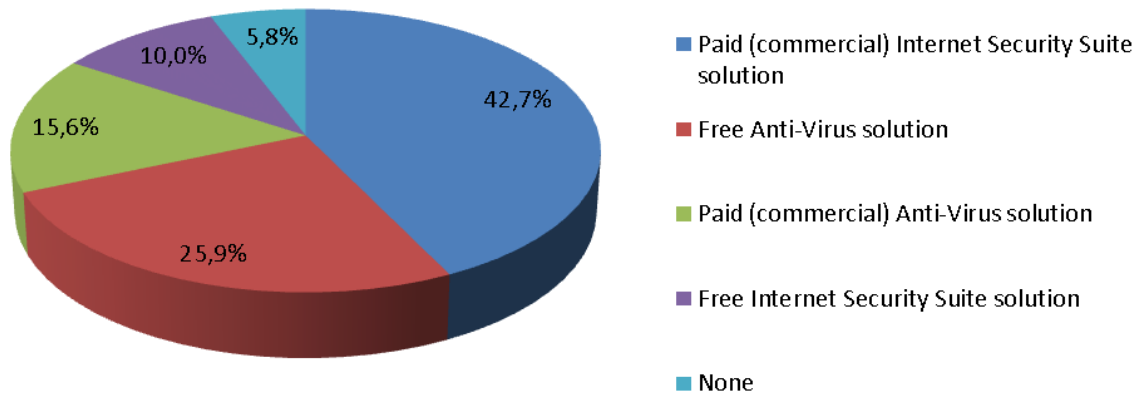
In August 2014, we issued our third review/test of Mac security products[3]. This report is available at http://www.av-comparatives.org/mac-security-reviews/

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[2] http://www.startisback.com ; http://www.stardock.com/products/start8/
[3] A list of Mac security products can be found here: http://www.av-comparatives.org/av-vendors-mac/

4. Which type of security solution do you primarily use?

- Paid (commercial) Internet Security Suite solution
- Free Anti-Virus solution
- Paid (commercial) Anti-Virus solution
- Free Internet Security Suite solution
- None

Worldwide, just over half of users (58.3%) pay for a security solution. 5.8% of the users answered to do not use any security solution. It is however possible that some of these use Windows 8/8.1 and are not aware that this has an anti-malware program (Windows Defender) built in.

In Europe and North America, paid-for Internet security suites are the most popular solution, accounting for nearly half the users in each case. Commercial suites are also the most popular type of product in Asia, but here they only account for about a third of users, with free antivirus not far behind. In South and Central America, free AV is a whisker ahead of paid-for suites, with each one accounting for about a third of users.

5. Which mobile operating system do you use?
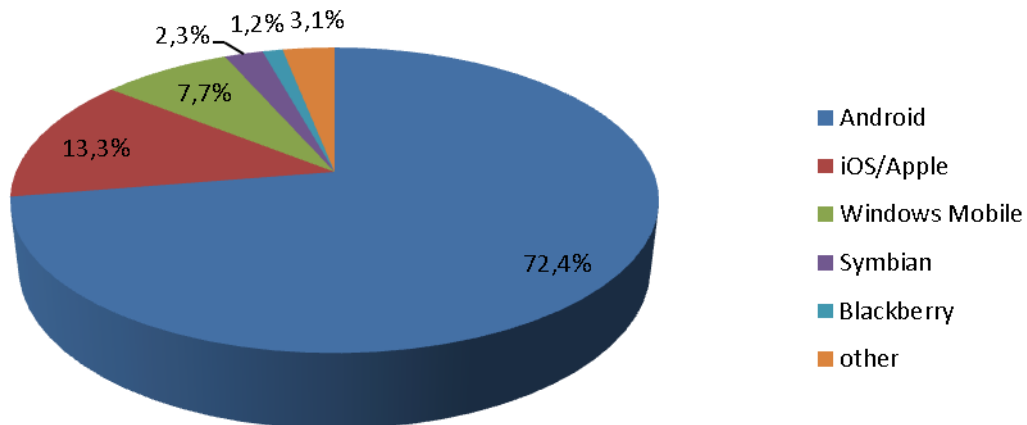
90.1% of survey respondents have a mobile phone. Of these, 72.4% use Android OS. Apple's iOS takes second place with 13.3%, followed by Windows Mobile with 7.7%.

In Europe, Asia and South/Central America, Android has a market share of 70% to 75%, with Apple's iOS accounting for 12% to 15%. In North America, iOS is more popular, with over a quarter of users (28%). South/Central America is the only region in which Windows mobile devices reach double figures (11%).
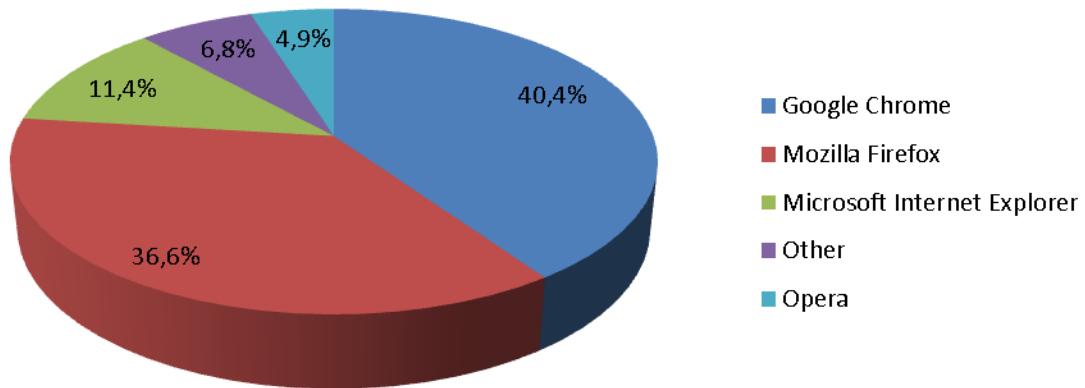
In September 2014, we issued a report reviewing Mobile (Android)[4] security products. This report is available at http://www.av-comparatives.org/mobile-security/

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[4] An overview of security products for Android can be found here: http://www.av-comparatives.org/list-mobile/

6. Which browser do you primarily use?

As shown in the diagram, Google Chrome is the most popular browser amongst survey participants worldwide, followed closely by Mozilla Firefox; relative to last year's survey,the two browsers have swapped places.

Firefox is a little more popular than Chrome in North America (40% vs. 36%) and Europe (39% vs. 38%). However, Chrome is the clear favourite in South/Central America (53% vs. 30%) and Asia (46% vs. 30%).

Internet Explorer comes in third place overall, a long way behind the other two browsers.

7. Do you think that in general, an Internet security suite offers more security than the same vendor' antivirus-only product?
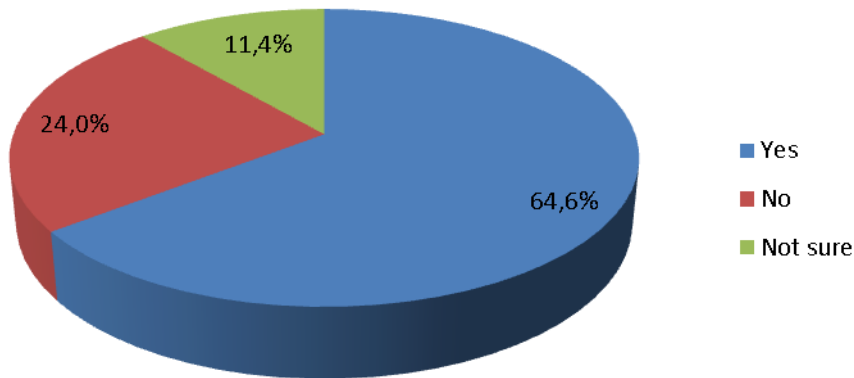
We do not have any information as to why nearly two thirds of respondents believe that an Internet security suite will provide more protection than a basic antivirus program. Many AV vendors like to give the impression that users can increase their protection by buying the more expensive suite, although this is not necessarily the case. AV-Comparatives' 2014 Firewall Test[5] indicates that quite a few security-suite firewalls fail basic protection tests that Windows Firewall passes. Some users may be unaware of the security features built into recent Micrsoft Windows versions, e.g. Smart Screen and Windows Firewall, and assume that such features need to be included in their security software. Some features found in security suites may not be relevant to all users, parental controls being an obvious example.

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[5] http://www.av-comparatives.org/wp-content/uploads/2014/04/avc_fw_201403_en.pdf

8. Which mobile anti-malware security solution do you primarily use on your smartphone?

25.7% of respondents overall do not use any security solution on their mobile phones. In North America, the figure is higher, at over 31%, while in South America and the rest of the world it is lower, at 17%. Figures for Asia and Europe are very much in line with the average.

Worldwide, the ten most commonly used manufacturers of mobile security products are, in decreasing order, Avast, Cheetah Mobile, Kaspersky Lab, ESET, Bitdefender, Qihoo, AVG, AVIRA, Panda, Symantec Norton and McAfee (Intel Security).

The list below shows the 10 most popular mobile security manufacturers used by survey participants, according to continent. There were not enough responses from some regions to produce significant results. Therefore, Australia/Oceania and Africa are not shown.

Europe	North America	Asia	South/Central America
1. Avast 2. ESET 3. Kaspersky Lab 4. Bitdefender 5. AVIRA 6. AVG 7. Cheetah Mobile 8. Qihoo 9. Panda 10. Symantec	1. Lookout 2. Avast 3. Kaspersky Lab 4. Webroot 5. ESET 6. AVG 7. Bitdefender 8. AVIRA 9. Symantec 10. MalwareBytes	1. Cheetah Mobile 2. Avast 3. Qihoo 4. Kaspersky Lab 5. Bitdefender 6. ESET 7. Baidu 8. AVG 9. Tencent 10. AVIRA	1. ESET 2. Avast 3. Kaspersky Lab 4. McAfee 5. AVIRA 6. AVG 7. Bitdefender 8. Panda 9. Symantec 10. Dr.Web

Avast took either first or second place on all four continents with significant results. In Asia, Cheetah Mobile and Qihoo 360 took the first and third places respectively, and have now appeared in the top 10 products in Europe as well.

Protecting mobile devices has become increasingly more important as BYOD (Bring Your Own Device) has continued its growth. Businesses expect employees practicing BYOD to have protection on their devices to secure any corporate information that may be on them, and to prevent unauthorised access to the corporate network.

Major products for mobiles were reviewed by AV-Comparatives in a report[6] in August 2014.

AV-Comparatives offers a free scan service (AVC UnDroid) to check Android apps for suspicious traits. It is located at http://www.av-comparatives.org/avc-analyzer/

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[6] http://www.av-comparatives.org/wp-content/uploads/2014/09/avc_mob_201407_en.pdf

9. How did you choose your current security solution?
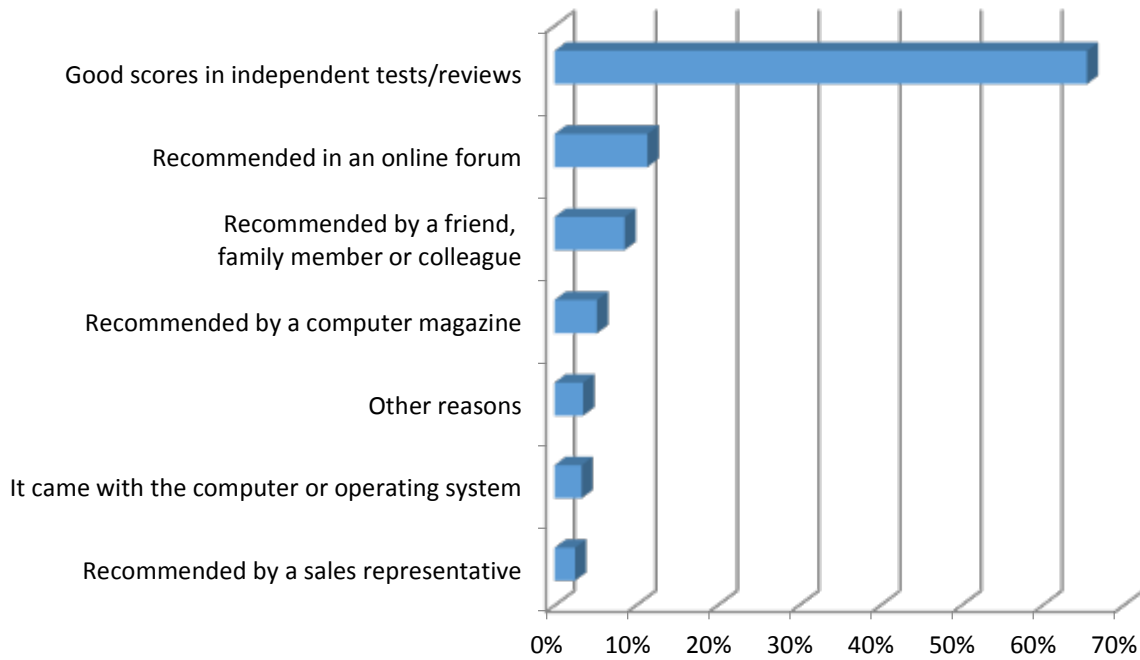
Survey respondents clearly value independent tests very highly when it comes to choosing security software, with approximately two thirds using these to select their security solution. Recommendations in online forums and from friends/family members then accounted for most of the remainder. We should point out that some of the forum members/family members/friends etc. may themselves consult independent test-lab results before recommending a product.

10.   Which anti-malware security solution do you primarily use?

Worldwide, the twelve most commonly used manufacturers of anti-malware products for Windows platforms are (in this order): Kaspersky Lab, ESET, Bitdefender, Avast, AVIRA, Symantec Norton, Qihoo 360, Panda, Microsoft, Emsisoft, AVG, F-Secure, McAfee and Trend Micro.

Comparison with 2014

The worldwide top 5 products last year were the same as this year, but in a slightly different order: Avast has dropped from last year's top spot to fourth this year.

Differences between continents 2015

The table below shows the top twelve manufacturers of the products most commonly used by survey participants.

Europe	North America	Asia	South/Central America
1. Kaspersky Lab 2. ESET 3. Bitdefender 4. Avast 5. AVIRA 6. Panda 7. Symantec 8. Emsisoft 9. F-Secure 10. Microsoft 11. AVG 12. G DATA	1. Kaspersky Lab 2. Symantec 3. Bitdefender 4. ESET 5. Avast 6. Microsoft 7. Webroot 8. AVG 9. AVIRA 10. McAfee 11. Panda 12. Trend Micro	1. Qihoo 360 2. ESET 3. Kaspersky Lab 4. Avast 5. Bitdefender 6. AVIRA 7. Microsoft 8. Tencent 9. AVG 10. Emsisoft 11. Panda 12. Trend Micro	1. ESET 2. Kaspersky Lab 3. AVIRA 4. Panda 5. Avast 6. Bitdefender 7. McAfee 8. AVG 9. Symantec 10. Trend Micro 11. Microsoft 12. Emsisoft

Europe: the top five on the continent is identical to the worldwide top five, i.e. the same products in the same order. G DATA and F-Secure (both based in Europe) only appear in the top 12 on this continent.

North America: McAfee, Symantec and Webroot, all headquartered in the USA, achieve higher places in North America than on any other continent. Webroot does not appear in the top 12 outside of North America.

Asia: the China-based Qihoo and Tencent appear in the top 12 here, but not on any other continent. Although headquartered in Asia, Symantec does not make the top 12 products on this continent.

South/Central America: ESET is the most popular product here, AVIRA takes third place, and Panda makes its only appearance in the top 5.

11.   Which security solutions would you like to see in our yearly public main-test series?

Below are the 15 top requested products. Users had to choose 12 products. Note that a number of the vendors listed below offer both free and paid products.

1. Kaspersky Lab
2. Bitdefender
3. Avast
4. AVIRA
5. ESET
6. AVG
7. Symantec/Norton
8. Panda
9. F-Secure
10. Trend Micro
11. McAfee
12. Microsoft
13. G DATA
14. Emsisoft
15. Qihoo 360

G DATA and Symantec Norton are the only products on the most-requested list that we did not test in the public main-tests last year and are not testing in the public main-tests this year. Neither manufacturer wanted to participate in all the compulsory tests of the main test-series[7]. However, we both will participate in some of our other tests and reviews, such as the Mobile Test/Review and the Business Review, as they did last year.

Further vendors included in this year's public main-tests are **Baidu, BullGuard, eScan, Fortinet, Lavasoft, Quick Heal, Sophos, Tencent** and **ThreatTrack Vipre**. Although we had originally intended to limit the number of public participants to 20 at most, the high demand for places in our public main-test series means that we have nonetheless agreed this year to publicly test products from 22 popular vendors[8] altogether.

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[7] Symantec did not wish to take part in the File Detection Test, while G Data declined to participate in the Real-World Protection Test.

[8] A list of AV vendors can be seen at http://www.av-comparatives.org/av-vendors/

12.   When was the last time that your PC was (unintentionally) infected/compromised by malware (i.e. that your security product failed to stop malware)?
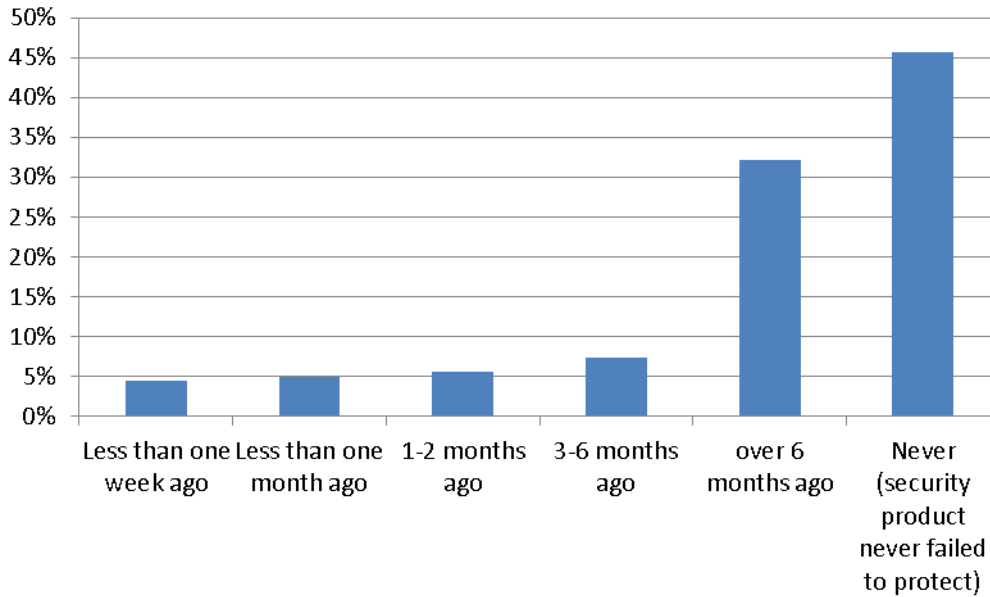
4.4% of respondents stated that their security product failed to protect their system within the last week. Over 76% stated that the last time their security product had failed to protect their system was either over six months ago or not at all.

In Europe the situation is best with 50% "never failed", with all the other three significant regions being between 43% and 45%.

13.   When was the last time your security product found/blocked or warned about a malicious file/website (i.e. that your security product successfully protected your system against a malware attack)?
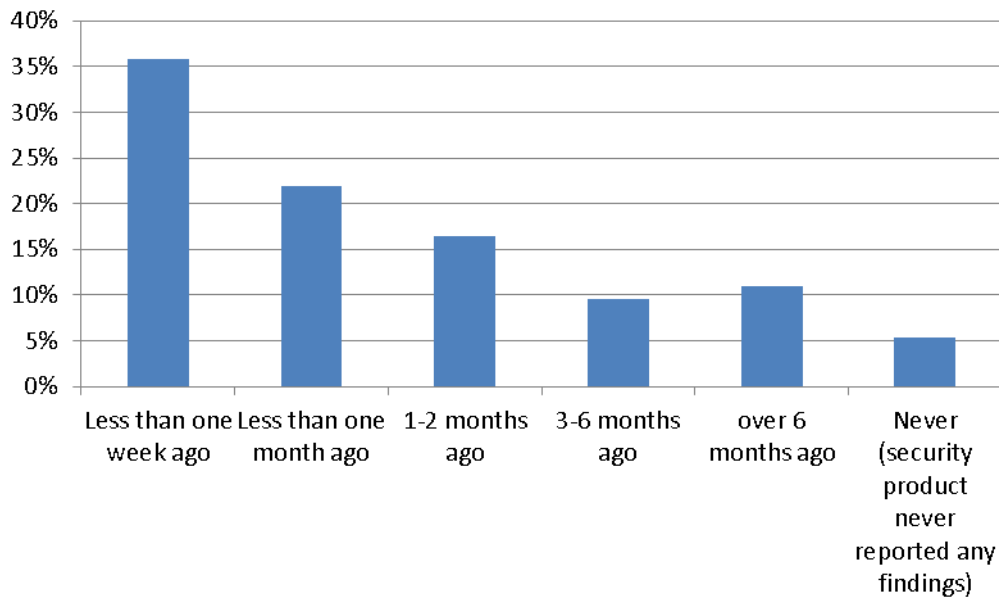

35.8% of the users stated that they encountered malware and that their security product successfully protected their system less than a week ago. 11% of the users said that the last time that their security product warned/protected them against malware was over six months ago. 5.4% never had any warnings from their security product.

Encounter rates are highest in Asia and South/Central America with around 43% of respondents saying they came across malware less than one week ago. In Europe and North America this figure is lower, at around 33%. Results for "never" are very similar across the continents, at 5% or 6%.

The results of questions 12 and 13 together may provide some insight into the effectiveness of current security software.

14.   Which type of tests/reviews are you most interested in (please choose 5)?
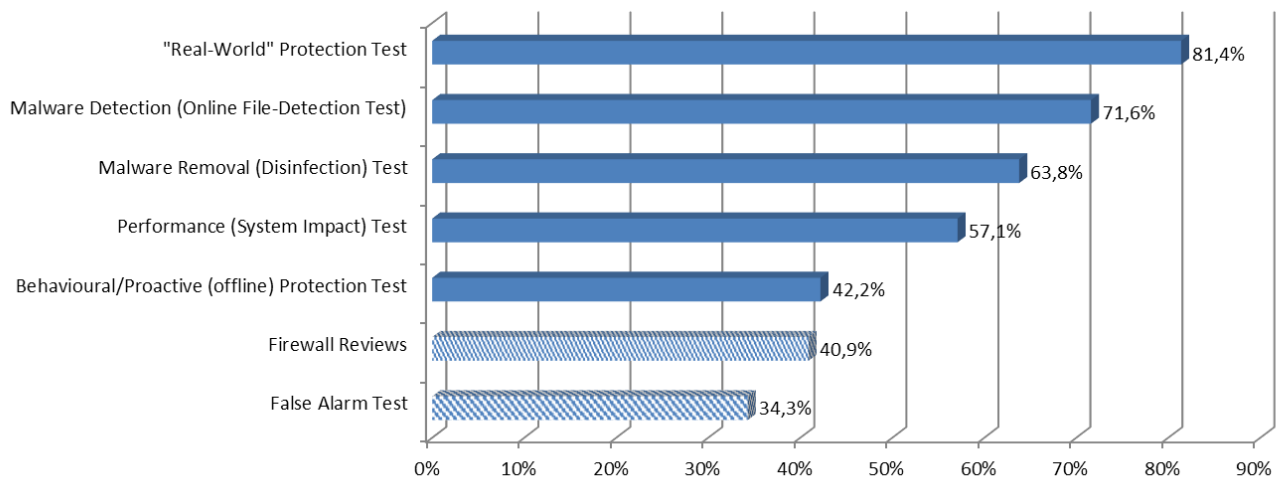
Perhaps due to our continued emphasis on the importance of our Real-World Protection Test, this test now tops the list in what our respondents are looking for. This is in spite of efforts by some manufacturers to advertise apparently similar tests by other labs, which use far fewer samples and consequently produce less-meaningful results.
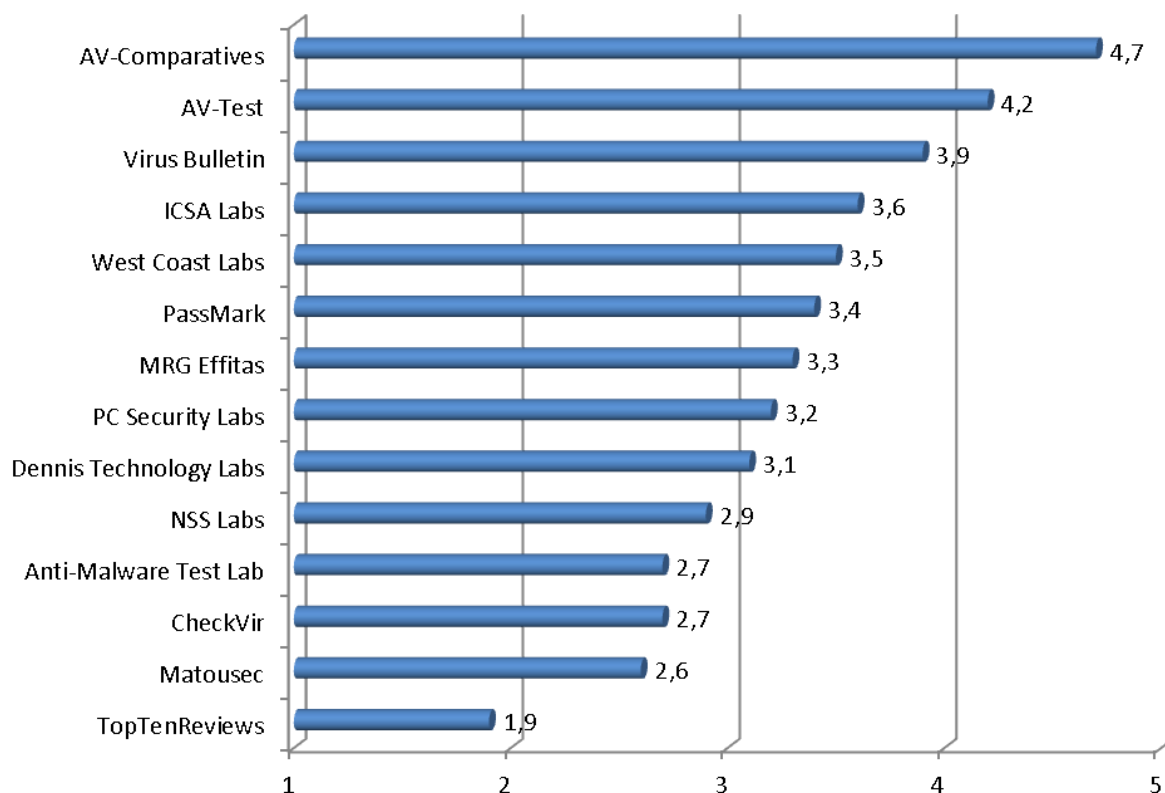
Whilst we feel that the Real-World Protection Test is the most relevant single test that we carry out, we also provide users with an all-round view of a product's capabilities[9]. Thus, we also perform File Detection, Heuristic/Behavioural, False Alarm, Performance, and Malware Removal Tests for Windows products, in addition to the Real-World Protection Test.

Additionally, we carry out Mac Security and Mobile Security Tests, as well as user-interface review of business security software, all the tested Windows products (Summary Report), and (on request) single products.

Our annual awards for Windows consumer products are based on the Real-World Protection Test, Overall Performance Test, File Detection Test, and False-Positive Test (all of which are compulsory), along with the optional Proactive Test and Malware Removal Test.

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[9] http://www.av-comparatives.org/comparatives-reviews/

15.   Which of the following testing labs are, in your opinion, reliable and trustworthy?

AV-Comparatives	4,7
AV-Test	4,2
Virus Bulletin	3,9
ICSA Labs	3,6
West Coast Labs	3,5
PassMark	3,4
MRG Effitas	3,3
PC Security Labs	3,2
Dennis Technology Labs	3,1
NSS Labs	2,9
Anti-Malware Test Lab	2,7
CheckVir	2,7
Matousec	2,6
TopTenReviews	1,9

Users had to rate various security product testing labs and institutes by giving a score from 1 to 5, where 5 meant reliable/trustworthy and 1 unreliable/biased. Note that not all respondents were aware of all the labs, so each lab was only rated by those who were aware of it.

AV-Comparatives and AV-Test reached a mean score of over 4. These two are also the best-known AV testing labs in the world. We hope that our high rating is down to the carefully prepared methodology of our tests, large number of samples, transparency, and freely available test reports, which describe the tests in detail. Our willingness to allow other publications to cite our results (subject to proper attribution) has also increased our visibility.

For products that are not tested by us, we recommend our readers to look at the tests done by other well-known testing labs or at least certification bodies. For a list of some other testing labs, go to http://www.av-comparatives.org/list-of-av-testing-labs/

16.   Which of the following magazines/reviewers are in your opinion reliable/trustworthy?
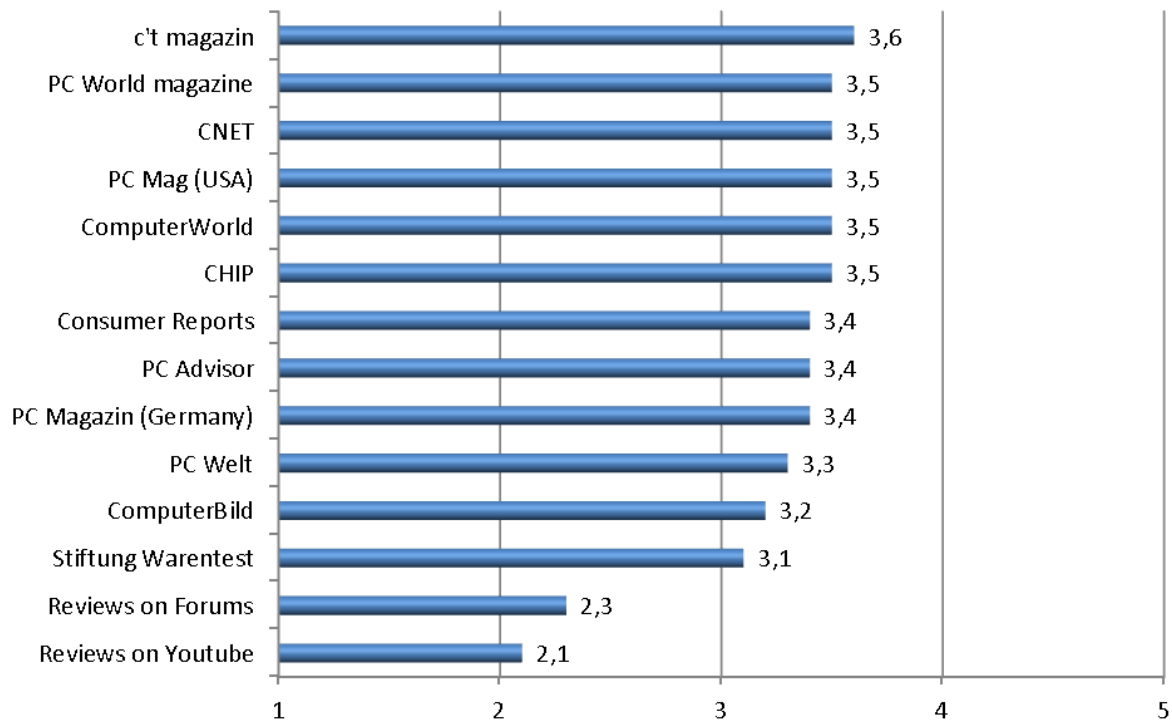
Users had to give a score from 1 to 5, where 5 meant reliable/trustworthy and 1 unreliable/biased.

Reviews on YouTube were regarded as the least reliable, probably because they are largely provided by users who are effectively anonymous. These reviews are typically focussed on user experience only. Often, the user may review/test only one product. Whilst some reviewers may write competent articles with integrity, other writers may base their opinions on e.g. a one-off bad experience with a particular product, or deliberately deceive readers in order to promote a product they have a commercial interest in, or to malign competitors. The same applies to reviews and opinions expressed on forums. In fact, there are paid bloggers[10], forum/YouTube posters etc. who provide e.g. biased or fake Amazon reviews[11] and feedback.

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[10] http://paidcontent.org/2012/08/07/judge-orders-oracle-google-to-disclose-paid-journalists-and-bloggers/
[11] http://www.forbes.com/sites/suwcharmananderson/2012/08/28/fake-reviews-amazons-rotten-core/

17.   What is important for you in a security product?

Low impact on system performance	**64.0%**
Good detection rate of malicious files (without being dependent on cloud/online connection)	**61.5%**
Good proactive/heuristic protection (without being dependent on cloud/online connection)	**57.9%**
Good malware removal/cleaning capabilities	**57.0%**
Low false alarm rate	55.7%
Good online protection rate while surfing the web	32.3%
Strong default settings providing already maximum protection/detection	24.4%
Participation in various independent third-party tests	20.4%
Low price (including free)	14.4%
Low user interaction/pop-ups from the security product	12.5%

Users were asked to select four charactersistics of an anti-virus product which they considered most important to them. It is interesting to note that the most popular item was "Low impact on system performance", suggesting that respondents have some faith in the protection offered by typical AV products, but not the speed. Malware removal/cleaning was also very popular. This may be because many respondents have found that their security software finds malware but cannot remove it, or possibly that they provide technical support for family, friends or colleagues whose machines have already been infected.

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For more information about AV-Comparatives and the testing methodologies, please visit our website.

AV-Comparatives (March 2015)