IT Security Survey 2017

AV
comparatives

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www.av-comparatives.org

Security Survey 2017

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 2016 – 15th January 2017**

Valid responses of real users: **2,513**

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.

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 sixth[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 2016 and 15th January 2017. A total of 2,513 computer users from around the world anonymously answered the questions on the subject of computers and security.
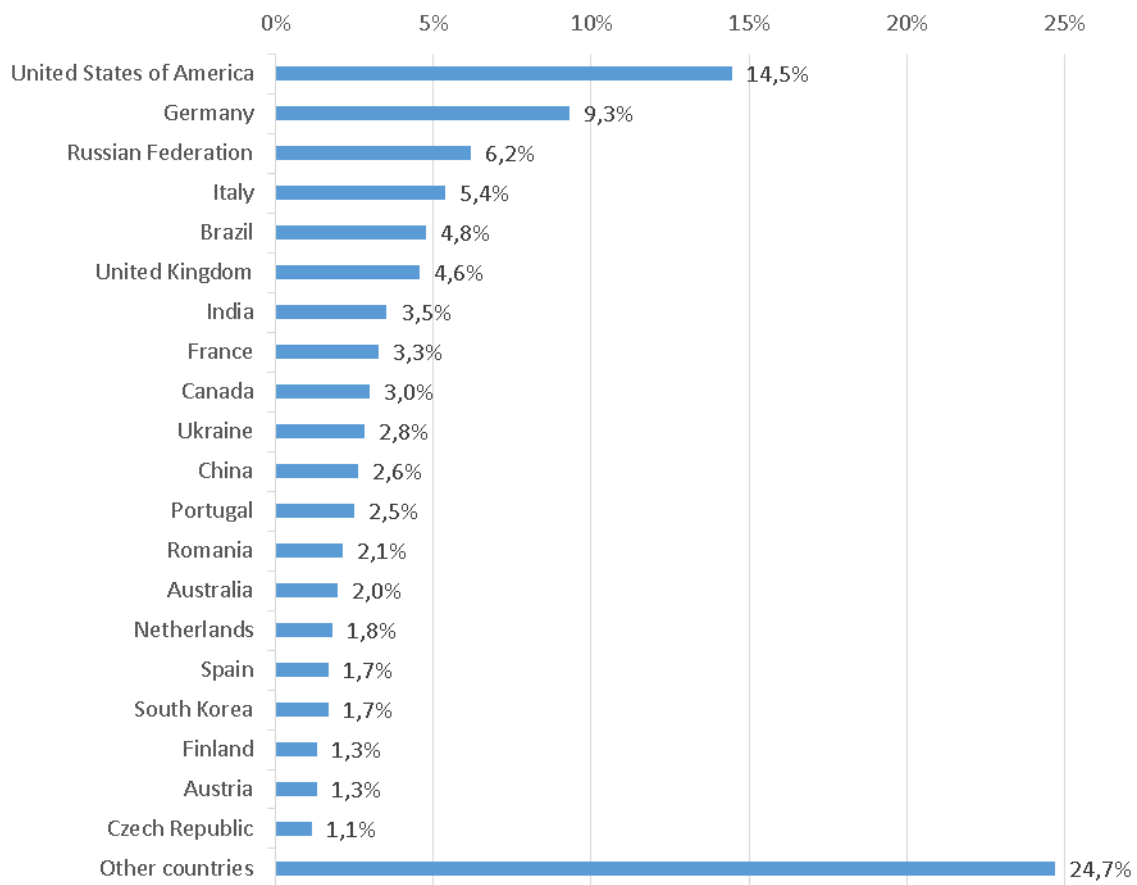
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[1] http://www.av-comparatives.org/security-usage-surveys/

Key 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.

- Kaspersky Lab is the most popular mobile security solution worldwide, while ESET and Avast make the top four on every continent.

- The share of Android as the mobile OS has risen slightly since last year. Apple's iOS has fallen slightly, but is the only other mobile OS to reach double figures, at just over 18%.

- A majority of users (86%) were well protected in the last 6 months, having not suffered a 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.

- The number of users who rely on free desktop security software has risen slightly this year, standing at 35.4% of users. However, the share of users who pay for a security solution has not changed, as there has been a drop in the number of users without antivirus software, which is now down to 1.8%.

- Well over half of this year's respondents (58.2%) have moved to Windows 10, leaving Windows 7 with just over a quarter of users (26.6%).

- Google Chrome is the most popular browser, with almost half of respondents (48.3%) using it. Mozilla Firefox accounts for most of the remaining users, with a share of over a third (33.6%). Despite being the recommended browser built into Windows 10, and the increasing popularity of this OS, Microsoft Edge is only used by 3.5% of users overall.

- As regards trustworthiness of reviews, forum and YouTube reviews both scored low again (under 3), whilst all the computer magazines/websites/institutes achieved scores between 3 and 4 out of 5.

- There is a wide range of views as to the fifteen test labs we asked users about, ranging from 3.0 to 4.7. Once again we are delighted to get the top score and thank respondents for their confidence in us.

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

1. Where are you from?

| Country	Percentage
United States of America	14,5%
Germany	9,3%
Russian Federation	6,2%
Italy	5,4%
Brazil	4,8%
United Kingdom	4,6%
India	3,5%
France	3,3%
Canada	3,0%
Ukraine	2,8%
China	2,6%
Portugal	2,5%
Romania	2,1%
Australia	2,0%
Netherlands	1,8%
Spain	1,7%
South Korea	1,7%
Finland	1,3%
Austria	1,3%
Czech Republic	1,1%
Other countries	24,7%

The graph above shows the top 20 countries of origin of our survey participants. Altogether, respondents came from 94 different countries.
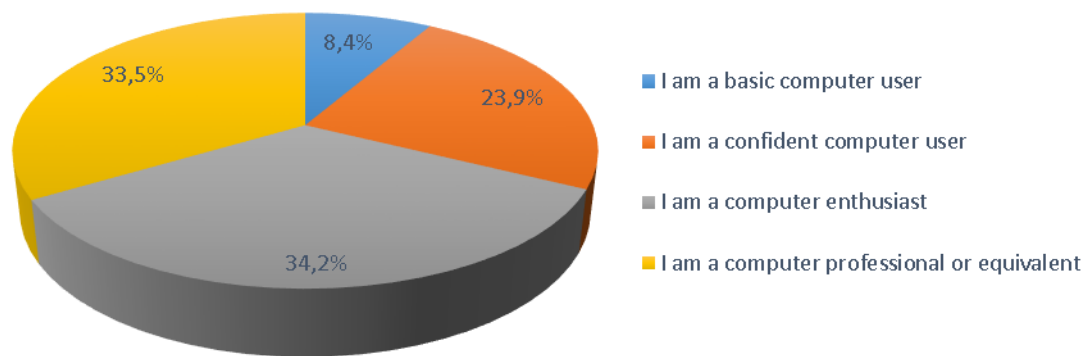
2. What is your age?
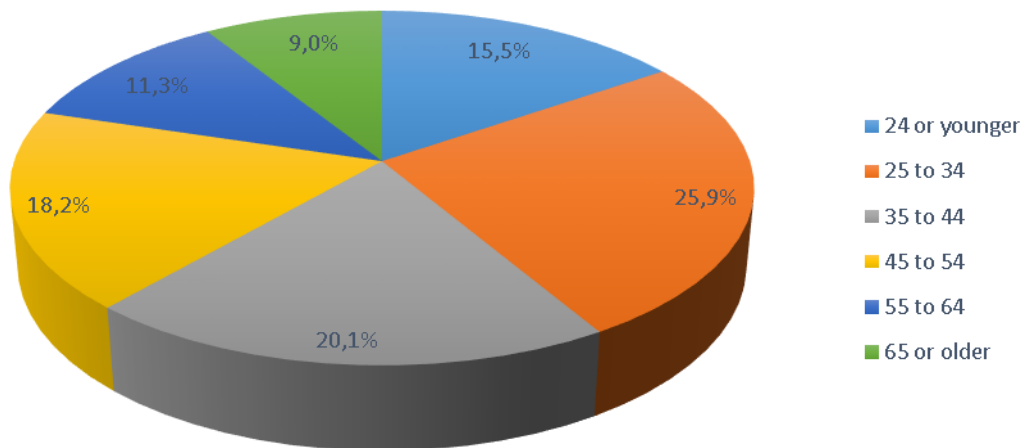
Age distribution by continent is shown below. Asia had the youngest respondents, with about 75% in the 18-24 and 25-34 brackets. North America had the oldest respondents, over 68% being in the 45-54, 55-64 or 65+ groups. South America had 42% in the 25 to 34 age group.
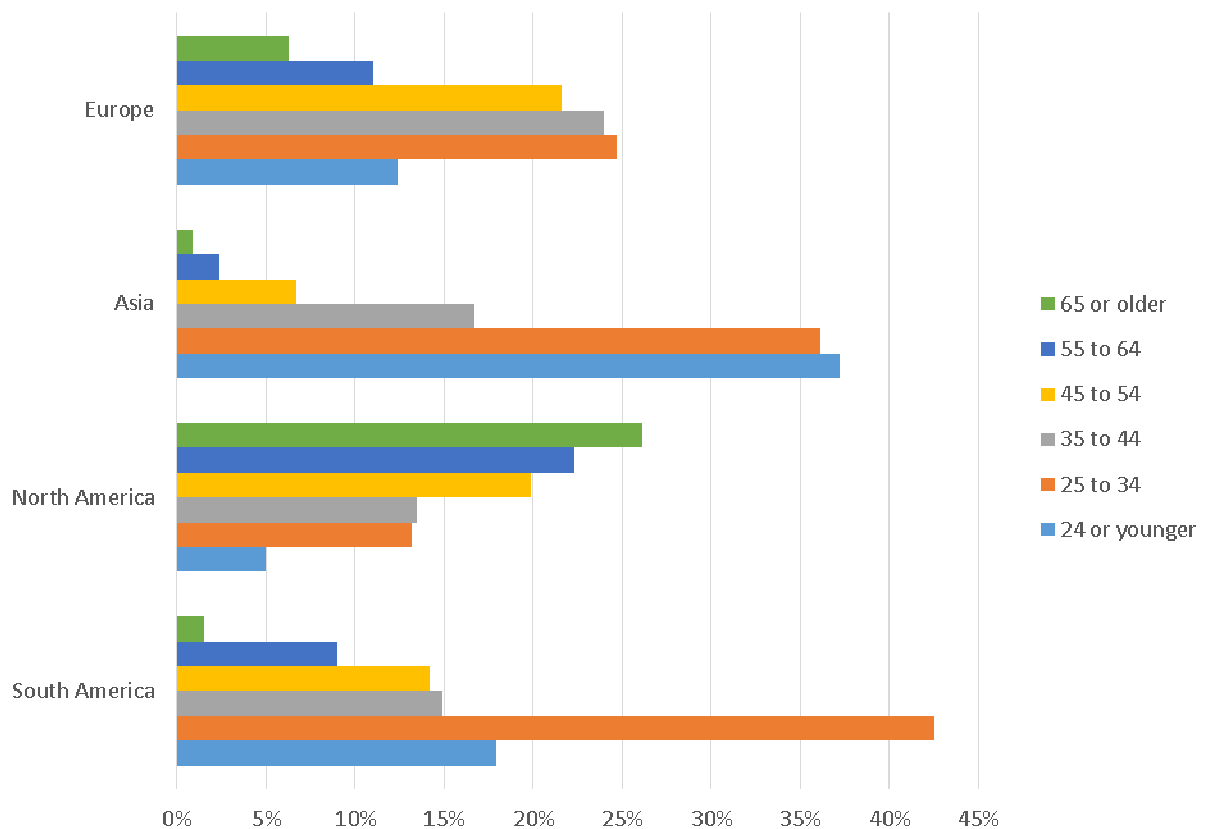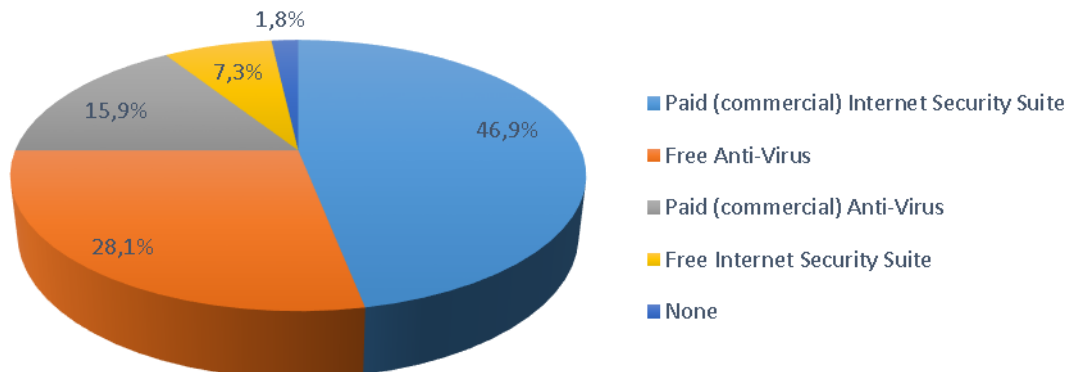
3. Which of the following best describes your level of computer expertise?

- I am a basic computer user
- I am a confident computer user
- I am a computer enthusiast
- I am a computer professional or equivalent

8,4%
23,9%
33,5%
34,2%

Worldwide, 67.7% of users who took our survey described themselves as computer enthusiasts or professionals. The highest number of computer professionals was found in South America (50%), while the highest number of basic users was for Asia (14.3%).

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

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

1,8%
7,3%
15,9%
46,9%
28,1%

Overall, 62.2% of users pay for a security solution, which is about 5% lower than last year. 1.8% of the users answered to do not use any security solution.

5. Which desktop operating system do you primarily use?
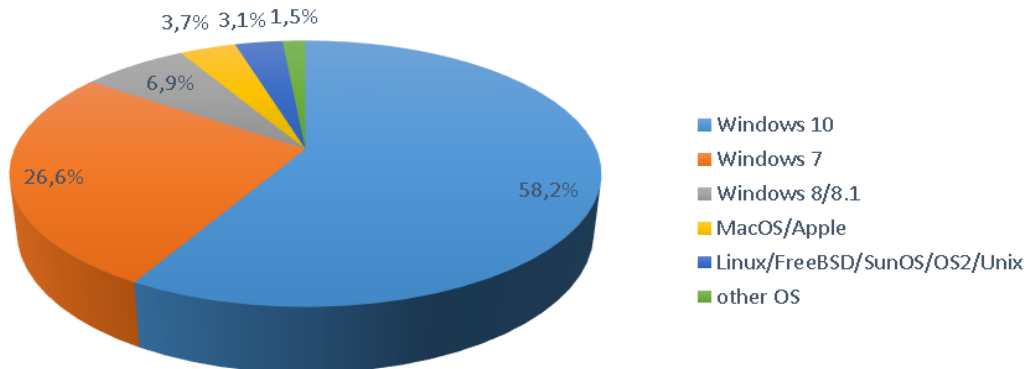
The most widely used operating system amongst respondents is Windows 10, accounting for over the half of the total OS usage. Windows 7 was the second most popular system, with about one quarter of participants using it. As in previous years, our survey respondents tend to use more recent versions of Windows than the general public (according to figures for all users provided by various metrics companies, such as NetMarketShare[2], Statista[3] and StatCounter[4]), which show Windows 7 as still being the most prevalent operating system with about 45% market share, followed by Windows 10 with about 24% market share.

In July 2016, we issued our fourth review/test of Mac security products[5]. This report is available at http://www.av-comparatives.org/mac-security-reviews/

6. Which mobile operating system do you use?
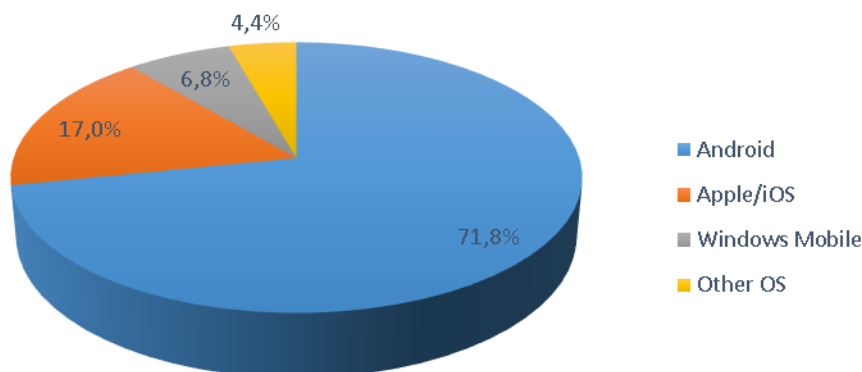
Android is the most popular mobile OS with our survey participants, accounting for over two thirds of users worldwide. In North America, iOS is more popular than in other regions, accounting for 30%.

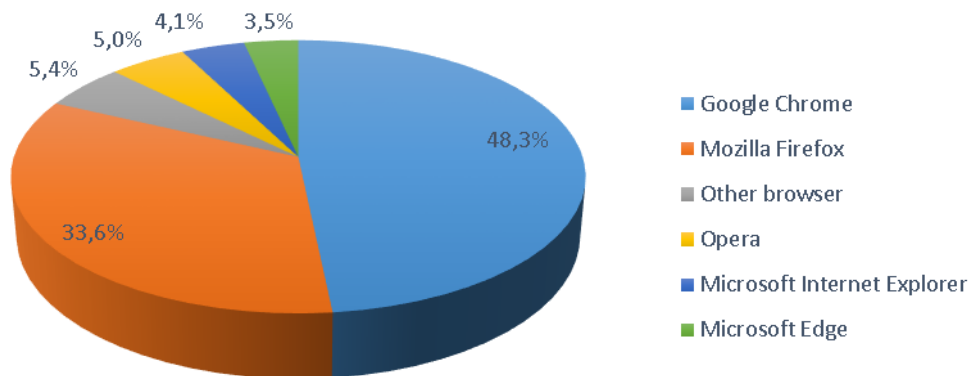In September 2016, we issued a report reviewing Mobile (Android)[6] security products. This report is available at http://www.av-comparatives.org/mobile-security/

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[2] https://www.netmarketshare.com/operating-system-market-share.aspx?qprid=10&qpcustomd=0
[3] http://www.statista.com/statistics/218089/global-market-share-of-windows-7/
[4] http://gs.statcounter.com/#desktop-os-ww-monthly-201610-201612
[5] A list of Mac security products can be found here: http://www.av-comparatives.org/av-vendors-mac/

7. Which browser do you primarily use?

As shown in the diagram, Google Chrome is the most popular browser amongst survey participants worldwide, with almost half of the respondents using it. In second place is Mozilla Firefox.

Despite the fact that more than half of survey respondents use Windows 10, only 3.5% of all participants use the Edge browser. This means that of Windows 10 users, only 5.6% use Microsoft Edge. As Microsoft's browsers have a very low market share, we will be using Google Chrome as the browser for our Real-World Protection tests in 2017.

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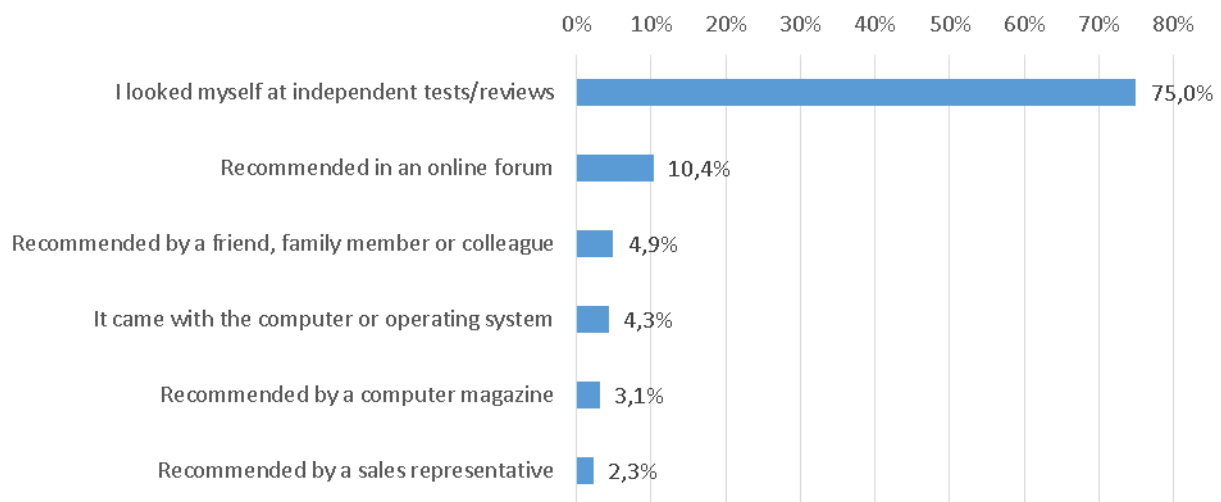
Survey respondents clearly value independent tests very highly when it comes to choosing security software, with three quarter using these to select their security solution. Recommendations in online forums and from friends/family members then account for most of the remainder. We should point out that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

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

9. Do you use your security product in its default settings or have you changed something?
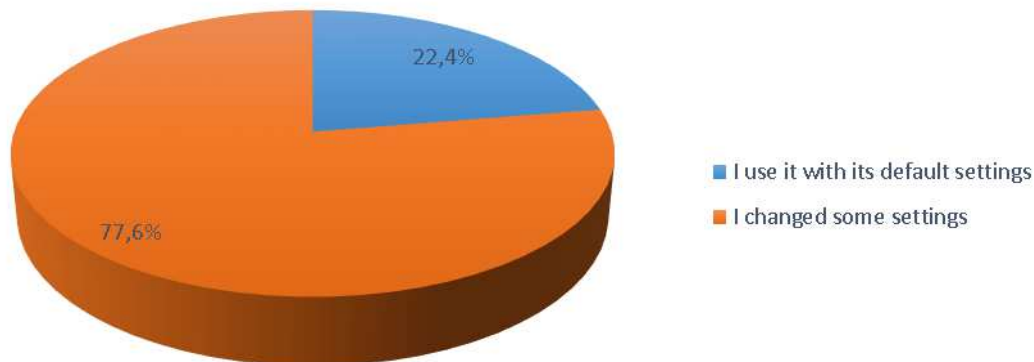
Respondents are increasingly changing default settings to fit their needs. Respondents who state that they have reconfigured their security program change the following settings most:
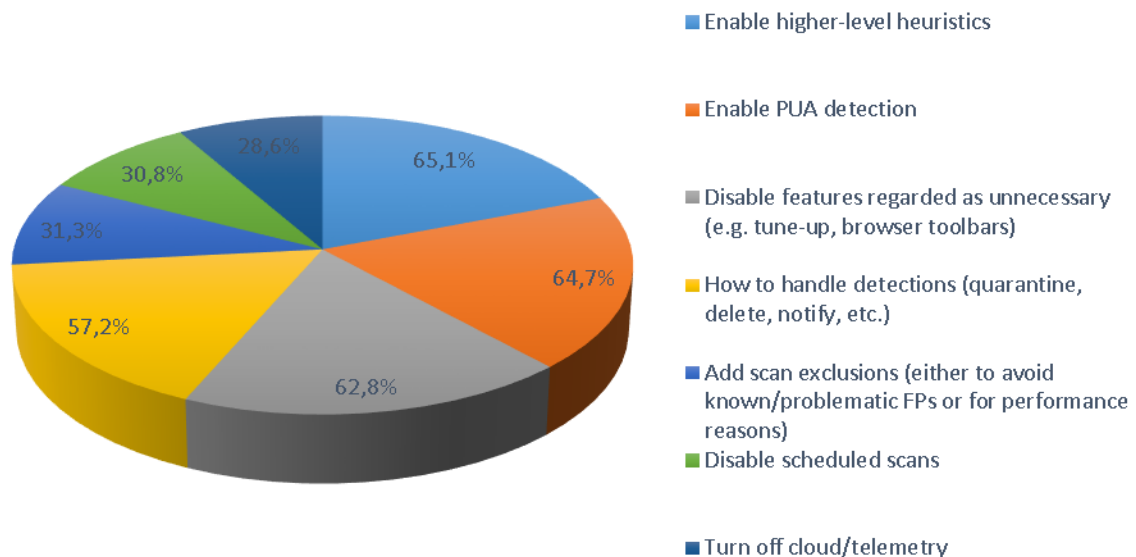
Vendors should take those responses into account, and deliver their products with higher protection settings already configured, remove unnecessary/bloat features (which are unrelated to security products, like tune-up software or toolbars) and be aware that an increasing number of users do not want to share telemetry data and/or cloud connections for better protection. The usability with regard to handling detections and adding scan exclusions is also important, as many users seem to make sure that these settings are configured the way they want them.

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

26.7% of respondents overall do not use any security solution on their mobile phones.

Worldwide, the ten most commonly used manufacturers of mobile security products are, in decreasing order: Kaspersky Lab, Bitdefender, ESET, Avast, Cheetah Mobile, AVIRA, Symantec, AVG, Dr.Web and Qihoo.

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. Bitdefender	1. Bitdefender	1. Avast	1. Kaspersky Lab
2. Kaspersky lab	2. ESET	2. ESET	2. Avast
3. ESET	3. Kaspersky Lab	3. Cheetah Mobile	3. ESET
4. Avast	4. Avast	4. Kaspersky Lab	4. Bitdefender
5. Cheetah Mobile	5. MalwareBytes	5. Tencent	5. Cheetah Mobile
6. AVIRA	6. Lookout	6. AVIRA	6. AVIRA
7. Symantec	7. Symantec	7. AhnLab	7. AVG
8. F-Secure	8. AVIRA	8. QuickHeal	8. McAfee
9. AVG	9. McAfee	9. AVG	9. Trend Micro
10. Qihoo	10. Cheetah Mobile	10. Dr.Web	10. Webroot

ESET was in the top three on all four continents with significant results, and Kaspersky Lab in the top four. In Asia, Cheetah Mobile (aka CM Security/CleanMaster) and Qihoo took third place, and remains among the top 10 products in Europe and South/Central America, as well now entering the top 10 in North America too.

Major products for mobiles were reviewed by AV-Comparatives in a report[7] in September 2016.

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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[7] http://www.av-comparatives.org/mobile-security/

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

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

Comparison with 2016

The worldwide top 5 products last year were the same as last year, but in a slightly different order: Avast has leapfrogged Avira to take fourth place.

Differences between continents

The table below shows the twelve products most commonly used by survey participants, by continent:

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

Europe: European vendors monopolise the top 5 here.

North America: MalwareBytes reaches 5th place on the continent. Microsoft (headquartered in the USA) makes it into the top 3.

Asia: the Chinese-based Qihoo appears in the top 10 here, and reaches 7th place in South/Central America.

South/Central America: The top five vendors here are the same as the top five globally, in Europe and in Asia, albeit in a different order.

There is a strong correlation between the most popular products amongst survey respondents and products that perform well in AV-Comparatives' tests. On 3 out of 4 continents, 4 out of the top 5 most popular products received an overall award (Product of the Year, Outstanding Product, or Top Rated) from AV-Comparatives in 2016.

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

Below are the 15 most-requested products. Users had to choose at least 10 products. Note that a number of the vendors listed below offer both free and paid products.

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

In order to take part in our Public Main-Test Series, a vendor has to agree to our conditions of participation, which include taking all of the compulsory tests. Some of the vendors who are frequently requested by survey participants decline to participate in all of these, and so these vendors cannot be included in the Public Main Test Series. Most of these vendors however usually participate in some of our other public tests and reviews, such as the Mobile Test/Review and the Business Review. Some big-name companies also commission separate tests and/or participate privately in certain tests.

13. When was the last time that your PC was (unintentionally) infected/compromised by malware (i.e. that your security product failed to stop malware)?
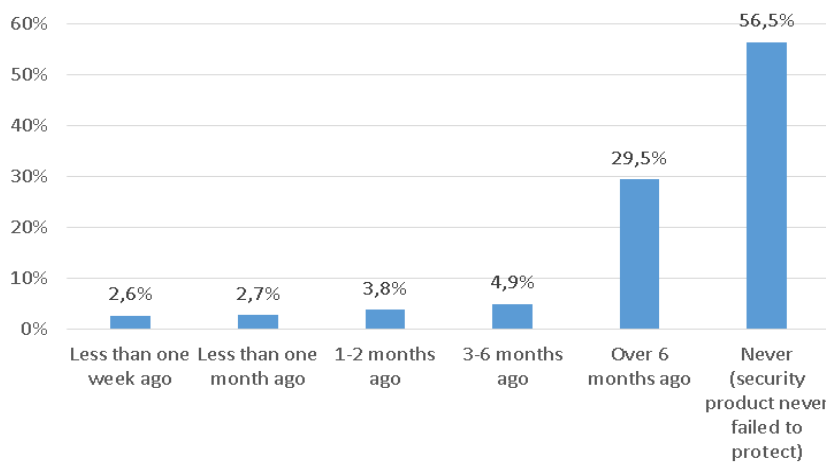
2.6% of respondents stated that their security product failed to protect their system within the last week. 86% stated that the last time their security product had failed to protect their system was either over six months ago or not at all. The numbers match those of last year's survey.
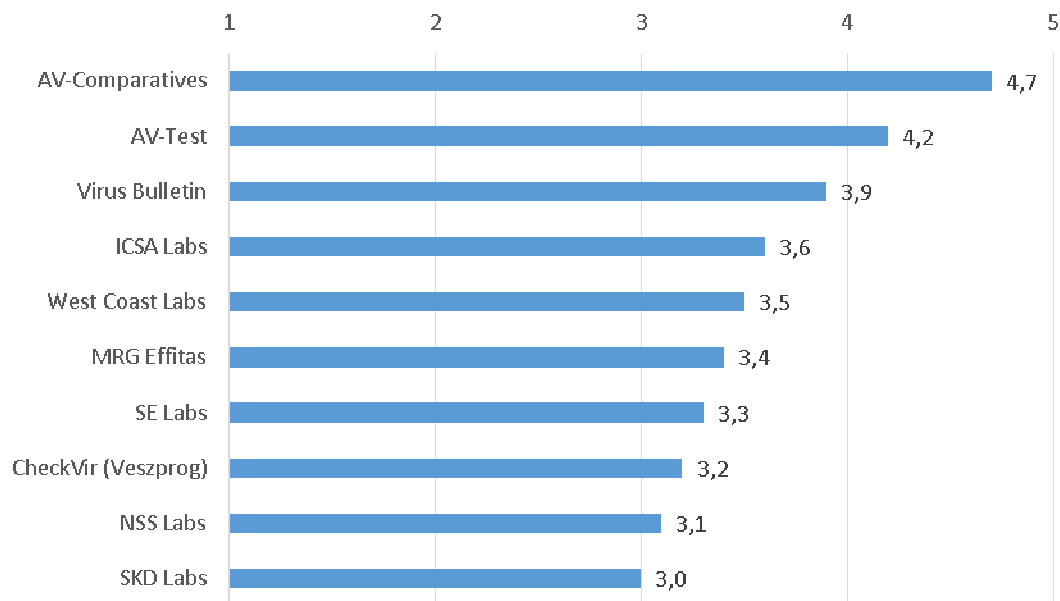
14. When was the last time your security product found/blocked or warned about a malicious file/website (i.e. that your security product successfully protected your system against a malware attack)?
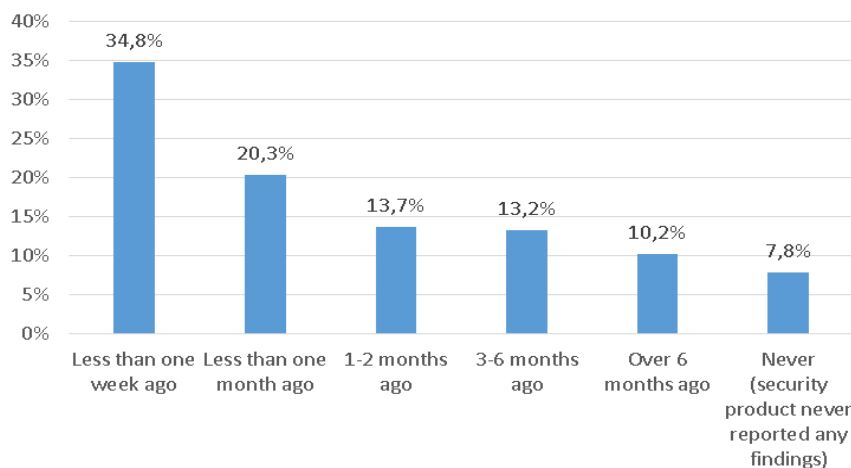
About 35% of the users stated that they encountered malware and that their security product successfully protected their system less than a week ago. 10% of the users said that the last time that their security product warned/protected them against malware was over six months ago. About 8% have never had any warnings from their security product.

The results of questions 13 and 14 together may provide some insight into the effectiveness of current security software.

15.   Which of the following testing labs are, in your opinion, reliable and trustworthy?
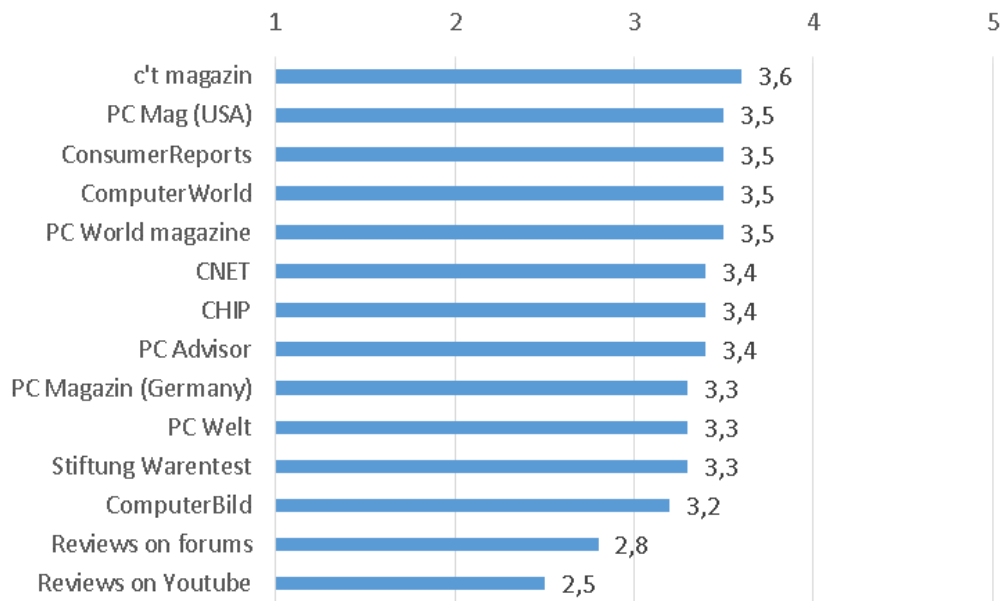
Lab	Score
AV-Comparatives	4,7
AV-Test	4,2
Virus Bulletin	3,9
ICSA Labs	3,6
West Coast Labs	3,5
MRG Effitas	3,4
SE Labs	3,3
CheckVir (Veszprog)	3,2
NSS Labs	3,1
SKD Labs	3,0

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 4 or higher. Together with Virus Bulletin, these are the three best-known AV testing labs in the world. We hope that our high rating is down to the carefully prepared methodology of our tests, meaningful 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?

	1	2	3	4	5
c't magazin				3,6	
PC Mag (USA)				3,5	
ConsumerReports				3,5	
ComputerWorld				3,5	
PC World magazine				3,5	
CNET				3,4	
CHIP				3,4	
PC Advisor				3,4	
PC Magazin (Germany)				3,3	
PC Welt				3,3	
Stiftung Warentest				3,3	
ComputerBild				3,2	
Reviews on forums			2,8		
Reviews on Youtube			2,5		

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 and give users a good overview of the user interface and certain aspects of the products, 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[8], forum/YouTube posters etc. who provide e.g. biased or fake Amazon reviews[9] and feedback.

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

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