An Updated Survey of Anti-Virus Software from Published Test Results
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- Anti-Virus or Internet Security Products for Windows in this slide set. (amended and posted 2/14/2017)

- Review of the Internet Security Scene, and Best Practices (in addition to having Antivirus Software). in an accompanying slide set

- Anti-Virus for Apple Mac Computers in an accompanying slide set.

- Anti-Virus for Mobile Devices, Apple & Android in an accompanying slide set. (posted 2/07/2017)

Table of Contents:

Recommended Anti-malware for Windows computers

Comparison of Top Rankings by multiple evaluators

Positives & Negatives pages about each brand product (beginning with slide #15)

References – website reports and articles

Recommendation for Selecting an Anti-malware program for Windows:

1) The best of the free ones remain Avira and Avast. (despite some opinions in favor of AVG free)

- AVG free gets only a Fair Operating Stability rating from Virus Bulletin.

- AVG also has a lengthy blog dialog on the AVG support site over annoying advertising Pop-ups.

2) The top ranking of the paid ones are Bitdefender, Kaspersky, and Norton Security. (see next page)

(but fewer test results available on Norton)

- Kaspersky has only a "Stable" (less than "Solid") operating stability in Windows 10, by Virus Bulletin.

All of these Antivirus or Internet Security programs seem to have some "warts;" it is suggested you read the detail pages beginning at Slide #15 for the Positives and Negatives identified.

Example:

Avira was downrated by PCMag for long scanning time and that its Browser protection works only with Chome and Firefox.

These "warts" may or may not matter to you significantly.
- just leave the computer alone for a couple of hours to run a full scan every couple of months?
- don't use Internet Explorer or Edge browsers?

There is moderate agreement among the various evaluators which are the best among the paid programs: (naming 1st, 2nd, 3rd. . place rank for each)

AV-Comparatives: Bitdefender, Kaspersky, Tencent, ThreatTrack; (Norton was not tested; Trend Micro did rather poorly).

AV-Test, Win7: Bitdefender, Kaspersky, Trend Micro, Norton.

AV-Test, Win 10: Avira Pro, Kaspersky, Bitdefender; Quick Heal tied with Trend Micro.

PCMag: Webroot, Bitdefender, Norton, Kaspersky (editor picks) (and good reading for Neil Rubenking's evaluation)

SE Labs: Kaspersky, ESET, Norton, Trend Micro (the four AAA)

Virus Bulletin: Trustport, Quick Heal, TenCent, Bullguard, ZoneAlarm, Bitdefender (Trustport not tested by the others)

Consumer Reports (2016): Bullguard, G Data, Zone Alarm, ESET. (Consumer Reports testing doesn't agree well with these others but its evaluation comments and reader feedback comments make worthwhile reading)

2) Among the for-pay programs:

Trustport, Bullguard, BitDefender, G Data, and ESET all have Solid Operating Reliability; and Kaspersky has a Stable rating, by Virus Bulletin.

All of the above provide nearly perfect protection.

(Virus Bulletin didn't test Norton or Trend Micro)

Should I change the anti-virus software I have?

No, if you are content with the product you have:

- haven't experienced any problems or annoyances
- current product still rates among the best
- you or the vendor has updated it to the latest version
- the virus definition files update automatically
- you have as many additional security features in it as you desire (anti-phishing, malicious website warnings, parental controls, etc. - that are provided in Internet Security Suites, rather than just Antivirus).

If otherwise, you may want to consider a change.

Special case: I still recommend you replace Microsoft Windows Defender or Security Essentials with a better product. (comments next)

About Microsoft Windows Defender:

The version in Windows 10 is like Microsoft Security Essentials in earlier versions of Windows.

- has improved from year to year, but
- its test results do not yet equal the average of the 3rd party competition. (Ref. Neil Rubenking, PCMag review)
- it's PCMag malware blocking test score is among the lowest of ten free antivirus products.
- its Smart Screen filter works only in the Microsoft Edge or Internet Explorer browsers.

It's easy to upgrade from WD or MSE, because
3rd party AV products simply install over WD or MSE, and turn it off.

Other reasons to consider selecting your anti-malware protection yourself:

- If you're buying a new p.c. - probably has a 30-day trial of some paid product.
- You have a yearly subscription about to expire;
- Desire to change from paid to free, or vice-versa

Considerations for choosing paid vs. free:

Paid programs -

- don't pester you (as much) with pop-ups to upgrade
- have better product support options
- offer extra features in Internet Security Suites

More about Product Recommendations for 2017

Free Anti-virus:

AVG, Avast, and Avira are all good programs,

all reviewed by PCMag.

- AVG coming out slightly on top in Consumer Reports 2016 ranking.
- both AVG and Avast earned PCMag's Editors' Choice.
- You should have more than 2GB of active memory to run AVG, though; it's a memory hog.

- Avast offer a number of built-in free optional features -
  - Network security inspector, SafePrice best deal finder, Software Updates detection (lighter alternative to Secunia PSI)
  - Safe-zone browser is Avast's own, with automatic online banking protections (unknown if this has been reviewed)
  - If you install another antivirus product, Avast automatically turns off its real-time activities to avoid conflicts.
  - Also refer to full slide of pros & cons for Avast, below

Some miscellaneous observations about these anti-malware products this year:

- Bullguard is the only product whose Firewall is good enough to substitute for Windows own firewall [CR]
- Even the paid versions of some AV products will try to sell you more add-ons; AVG and Bitdefender named in particular (from blogs on Windows Secrets User Forum)

Decoding the meaning of Consumer Reports' Scoring;
 (categories in order from left to right on CR Ratings page)

- Overall Score is based on performance detecting and blocking both online and offline threats, ease of use, and effective response to newly-discovered malware.

- Threat Blocking score shows how well the product protected automatically against live exploits from websites and local drives.

- Ease of use score covers installation, changing settings, interacting with the software, and getting help.

- Firewall rating: how well the software and its firewall stopped rogue connections to and from the internet. For products without a built-in firewall, the default Windows Firewall was enabled.

- Malware Scan score rates the effectiveness scanning the p.c. on demand for malware, both online and offline.

- Use of Resources measures the software's use of memory, impact on boot-up time, and tendency to slow computer operation during a scan (for malware).

Consumer Reports' Scoring Categories, continued:

- Anti-phishing score rates the ability to block websites known to host malware or fraud.

- Updating score rates how soon the product was updated to detect newly discovered malware.

- USB Drive Threats score indicates how well the product detected, blocked and removed malware on external (storage) drives.

- Response to Threats score indicates effectiveness of the suggested or default response to a detected threat.

Unfortunately, Consumer Reports doesn't identify the p.c. hardware & operating system on which the testing was done!

The next sequence of slides contains Consumer Reports editors' and others' comments on the individual Anti-virus or Internet Security Products,(in the order in which they appear in the Consumer Reports Ranking Table (from April 2016, although CR readers' feedback is dated as recent as 1/2017)
Unless otherwise noted, Virus Bulletin rated all as having Solid operating stability in both Win 7 and Win 10.

CR tested MalwareBytes Premium product; its conclusions – not meant to be a standalone Internet protection product. CR tested it with the default Windows Defender enabled, and it did not fare as well as Windows' own protections overall.

AVG Free Antivirus 2016, CR score 59, SEL AA,

Virus Bulletin downrated stability to Fair in Windows 10 (one restart in test)

Scanning for PUPs needs to be enabled manually (recommended)

Positives:

- Consumer Reports' best free product nod (2016)
- is one of three PCMag Editors' Choice free products , overall score 8.4
- Informative help and clear warnings
- AVG found and removed 36 viruses that Avast never saw or removed (comment in Windows Secrets Forum)
- Downloadable emergency recovery tool / startup repair

Negatives:

- Unable to block most malicious Web pages; malware blocking just average;
- Heavy use of memory, about 400 MB.
- CR user feedback "pop-up ads interfere with other programs" 4/17/16 and points out same complaints in AVG's own customer support blog.

Advice: when installing AVG, use "Custom Installation," to avoid PUP add-on, (called Zen, that tries to sell you other AVG products.)

Comment: Its browser plug-in can block some phishing websites, but requires using its ad-supported search provider.

Avast Free Antivirus 2016; CR score 57, SEL AA

Scanning for PUPs needs to be enabled manually (recommended)

Positives:

- is one of three PCMag Editors' Choice free products, score 8.7
- easy on p.c. resources
- Virus Bulletin comment: Detection was very strong, with just a slight decline into the proactive sets
- Malware updates posted quickly
- Bonuses – WiFi network security inspector, and more (see rec. page)

Negatives: (PCMag note: optional password manager is primitive)

- Installs adware in Chrome and Firefox
- Weak help system, (and rescue disk is an ISO file you must burn to CD)
- Does not scan USB drives on access
- Warnings close too quickly
- Default action does not remove malware
- Anti-phishing detection not as good as last year (PCMag)
- 1 review on CR, 17/2017: crashes or freezes; hard to install or uninstall, uninstaller instructions caused corruption of customer's password database.

Avira Free Antivirus 2017; 2016 CR score 56

(No user comments in Consumer Reports)

Positives:

- AV-Comparatives Product of the Year Award – highest total scores
- Very good malware blocking and malicious URL blocking in PCMag tests; Advanced+ certification from AV-Comparatives.
- Downloadable emergency recovery tool
- Clear user interface
- Informative help and clear warnings
- Suite of companion protection products offered, some are free.

Negatives:

- Price-comparison browser plug-in is essentially adware
- Browser Safety component (flag malicious web pages, and antiphishing) does not work with Internet Explorer (but may not concern you if you use Chome or Firefox browsers)
- PCMag reports extremely slow full-scan time (typ. 2+ hours) and sluggish Real-time Protection mode.

(note: not tested by SE Labs)

G Data Internet Security (has a best-buy rating from CR)

Virus Bulletin reports it Stable in Win 7, Solid in Win 10.

Positives: ($30/yr); CR score 66, SE Labs AA

- Nicely designed user interface

- Informative help and clear warnings

- Malware updates posted quickly

- best malware-detection performance among tested products in on-demand scan (Consumer Reports)

- Downloadable emergency recovery tool

- Inexpensive ($30/year), yet full-featured

Negatives:

- CPU use very high (but RAM use about average)

- Somewhat weak in blocking malicious Web pages

- Interfered with using POP mail accounts with the
    Windows Mail app in our tests

ZoneAlarm Pro Anti-Virus + Firewall   (3rd of CR's 5 rec.)

Positives: ($45/yr); CR score 65

• Excellent at blocking Web threats

• Malware updates posted quickly

• Downloadable emergency recovery tool

• Very good firewall

• Clear warnings

• Relatively inexpensive

Negatives:

• Lacks parental filter and spam filter

• Slows file copying

• Tries to upsell you to a premium subscription plan with additional
   features

• Lacks informative help

• Virus Bulletin gives it only a "Fair" stability rating in Win 10

• (note: not tested by SE Labs)

Bullguard Internet Security: (Consumer Reports' #1 of 5)

Positives: ($60/yr), CR score 70

- Consumer Reports opinion - best of paid suites in 2016
- Strong detection and Excellent stability
- Low CPU use, and fairly standard memory use
- Very good at preventing infections from USB drives
- Malware updates posted quickly
- Clear user interface and warnings
- Very good firewall performance, working together with Windows firewall.

Negatives:

- Firewall warnings may occur during normal use
- Interfered with the Windows Mail app in our tests
- Lacks informative help or Startup Repair

  (note: not tested by SE Labs)

ESET Smart Security (4th of CR's 5 recommended prod.)

Positives: ($80/yr), CR score 65, SE Labs AAA

- Excellent at blocking Web threats
- Malware updates posted quickly
- Downloadable emergency recovery tool
- Informative help and clear warnings

Negatives:

- Relatively expensive per year
- On-access malware warnings close too quickly unless clicked
- May leave some malware on USB drives
- Two of our own members have observed slow p.c. operation that improved significantly when ESET was replaced by Norton Security.

Kaspersky Internet Security (5th of CR's 5 recomm. prod.)

Positives: ($55/yr), CR score 64, SE Labs AAA

- a PCMag Editors' Choice
- Excellent at blocking Web threats
- Malware updates posted quickly
- Downloadable emergency recovery tool, and startup repair
- Clear user interface for basic functions, and informative help

Negatives:

- Uses the somewhat weak Windows firewall
- Some notifications and event logs are unclear
- Doesn't perform all that well in Virusbtn.org tests (Windows 7 only)
- Conflict with downloaded Quickbooks
- Virus Bulletin gives it a Stable rating in Win10 (not as good as "Solid")
- Virus Bulletin reports 95% increase in time to perform standard file activities
- CR user feedback states Kaspersky tends to slow down the computer more with the passage of time.

Bitdefender Internet Security 2016, $50/yr. CR score 62

Positives:
- Excellent at blocking Web threats
- very good at preventing infections from USB drives
- Malware updates posted quickly
- Downloadable emergency recovery tool
- Clear warnings

Negatives:
- Poor firewall performance
- Uses about 600MB of memory, higher than most
- Relies on a screen "gadget" to notify problems
- User must choose an action for malware discovered in a scan
- user interface was unclear in some parts, and help was limited

CR user feedback, one, 5/14/16: works well, easy to use and for the most part stayed out of the way, but auto-renewal took payment but failed to extend subscription; hassle, and gave up after 2 weeks of contacts with the company trying to get it fixed.

Trend Micro Internet Security 10, $50/yr; score 61

Positives:
- Excellent at blocking Web threats, and good overall protection
- Malware updates posted quickly
- Downloadable emergency recovery tool, has startup repair
- Clear warnings.
- Offers a spam filter and parental controls.

Negatives: a few quirks -
- Installs several browser extensions in Internet Explorer & Firefox; installs just a toolbar in Chrome.
- Pops up ads for the mfr's premium product
- Help system takes over entire display screen
- Malware detection dependent on Internet connection

CR user feedback, 1 review, very content with it, no infections, easy to use, and appreciates warnings if a website is dangerous.

SE Labs score AAA

F-Secure Internet Security, $70/yr.; CR score 61

Positives:
- offers good basic protection, and guides you to the right action when malware is detected.
- Downloadable emergency recovery tool, and startup repair
- Clear warnings
- Offers spam filter and parental controls

Negatives:
- Uses the somewhat weak Windows firewall
- Interfered with using POP mail accounts with the Windows Mail app in our tests
- help system is weak.

(no user feedback in Consumer Reports)

(not tested by SE Labs)

Norton Internet Security Deluxe, $40/yr. score 61

Positives: SE Labs score AAA
- Excellent at blocking Web threats
- Downloadable emergency recovery tool, and startup repair
- Clear warnings

Negatives:
- 2016 Norton Security didn't match last year's in overall performance.
- its firewall did not block outgoing communications from unknown malware.
- Lagged in obtaining malware detection updates
- Lacks parental filter (but has a spam filter)
- Help system informative, but hard to navigate
- the on-demand scan for malware detection needs an Internet connection to be effective.

CR user feedback – 2 very satisfied customers; $40/year covers up to 5 computers, a low cost for each.

McAfee AntiVirus Plus, $60/yr, CR score 49

Positives:
- Good warnings about disabled protection
- Scans network for unprotected PCs

Negatives: SE Labs score B
- Wasn't very good at blocking threats on websites
- inferior to other products at recognizing recent and new malware.
- Requests using an alternative search provider
- Malware detection updates delayed
- Malware detection dependent on Internet connection
- User interface cumbersome
- Warns if McAfee's product is not active on other PCs on the network
- Lacks parental filter and spam filter

CR user feedback, one review, 1/17/17: In conjunction with True Key password protection, on 2 pc's, kept losing WiFi connection, until True Key removed; new problem since installing McAfee.

References for further detail:

Windows Anti-Malware products;

1) Neil J. Rubenking, editor, PCMag (online) January 23, 2017:
   "<u>The Best Free Antivirus Protection of 2017</u>" (ten reviewed).
   Each product has a very complete evaluation report, accessed
   by clicking on the product name in the "Name" row at top of the
   chart given by the following link. Note red balloon Editor Rank.

   http://www.pcmag.com/article2/0,2817,2388652,00.asp?ipmat=256703&ipmtype=26

2) Neil J. Rubenking, editor, PCMag (online) – similar article:
   "The Best Antivirus Protection for 2017" (paid products)
   http://www.pcmag.com/article2/0,2817,2372364,00.asp

3) Simon Edwards Labs. Home Anti-Malware Protection Report,
   Oct.-Dec. 2016.   Testing 3 free and 6 paid AV & IS products
   https://selabs.uk/en/reports/consumers.

4) AV-Comparatives Summary Report for 2016 (4 Feb. 2017)

https://www.av-comparatives.org/wp-content/uploads/2017/02/avc_sum_201612_en.pdf
   gives individual awards for Real Time Protection, File Detection, Malware
   Removal, Performance (use of system resources), and False Positives).
   Product discussion has extensive samples of product operating windows.

References: PC Magazine Online -

PCMag editor Neil Rubenking bases his ratings upon reviewing the test results of a number of independent test houses, including AV-test, AV-comparatives, Simon Edwards Labs (successor to Dennis Labs), and Virus Bulletin, plus his own malware-blocking test.