

## Anti-Virus Comparative



## Summary Report 2013

Awards, winners, comments

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[www.av-comparatives.org](http://www.av-comparatives.org)

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## Introduction

At the end of every year, AV-Comparatives releases a summary report to comment on the various anti-virus products tested over the year, and to highlight the high-scoring products of the various tests. Please bear in mind that this report looks at all the comparative tests of 2013, i.e. not only the latest ones. Comments and conclusions are based on the results shown in the various comparative test reports of AV-Comparatives, as well as from observations made during the tests (<http://www.av-comparatives.org/comparatives-reviews/>).

## Participating Vendors

The following vendors participated in AV-Comparatives' public main test-series of 2013 and agreed to have the effectiveness of their products independently evaluated. Microsoft asked to be included in the tests, but to be regarded as a baseline and not as competition to the other products.

We are happy that this year's tests have helped several vendors to find critical and other bugs in their software, and that this has contributed to improving the products.



Please note that the Chinese-language versions of Kingsoft, Qihoo and Tencent were used in our tests. For all other vendors, the English-language version was used.

## Management Summary

This year, AV-Comparatives has again subjected 22 security products for Windows to rigorous investigation. All the programs have been tested for their ability to protect against real-world Internet threats, identify thousands of recent malicious programs, and provide protection without slowing down the PC. Additionally, optional tests checked how well the products could remove malware from an infected PC, block new and unknown threats, and protect the user against phishing attacks. Whilst all of the programs in our test reached an acceptable level overall, some programs performed better than others, and our awards recognise the best results in each test and overall.

**AV-Comparatives' 2013 Product of the Year Award** for the best overall score, considering all the tests, goes to **Kaspersky Lab**.

In addition to the Product of the Year Award, we also give the Top Rated Award to products which have excellent results across our range of tests.

**Top Rated** products for 2013 are **Bitdefender, ESET, F-Secure, Avast, BullGuard, Fortinet** and **AVIRA**.

We feel that **Emsisoft** deserves a special mention for gaining the Silver Award in the Real-World Protection Test in its first year of testing.

The awards are based exclusively on the results in the tests. However, we have as usual looked at how user-friendly the products are in everyday use, and we have listed below some of the outstanding points from this review:

The main program windows of *Avira, Bitdefender, Kaspersky Lab, Microsoft* and *Trend Micro* make it very easy to find all relevant functions and information. In the event that any protection components are disabled, a "Fix-All" button will immediately reactivate them all.

The setup programs of *avast!* and *AVG* allow components and interface languages to be selected during installation. In both cases, the uninstall wizard allows the installed components and languages to be changed, and also has a repair function.

*Avast, eScan, ESET, Kaspersky Lab* and *McAfee* all allow basic functions to be carried out easily on a touchscreen device.

The setup wizard of *Emsisoft* provides a good explanation of potentially unwanted programs, illustrated with a browser that has been overrun with toolbars. Similarly, one of *Qihoo's* malware alerts explains very succinctly what a Trojan is, namely a dangerous program disguised as e.g. an audio or video file.

When the real-time protection of *F-Secure* discovers malware on a flash drive, the alert shown is clear, reassuring, and does not require any user interaction; expert users can however see further details.

*Sophos* uses Windows 8 Modern-Style alerts throughout. These are simple, clear, require no user interaction, and are consistent across Desktop and Modern Modes.

If protection components are disabled, *F-Secure* and *Trend Micro* supplement the rather fleeting warning from Windows Action Center with their own, much more obvious and persistent warnings.

*AVG*, *ESET* and *Kaspersky Lab* provide local help files, an online knowledgebase and a downloadable manual, all produced to a very high standard.

## Overview of levels reached during 2013

AV-Comparatives provides a wide range of tests and reviews in comprehensive reports (<http://www.av-comparatives.org/comparatives-reviews/>). Annual awards are based on the yearly public main test-series of 2013: **Real-World Protection Test**, **Performance Test**, **File Detection Test**, and **False-Alarm Test** (all compulsory), and the **Proactive Test**, **Malware Removal Test**, and **Anti-Phishing Test** (all optional). Vendors who choose not to have some features of their products publicly evaluated (i.e. did not participate in some of the optional tests) are still eligible for Product of the Year/Top Rated awards, but obviously have fewer opportunities to score points. Additional tests/reviews (not part of the main test-series, and not relevant to the awards) included: Mac Security Test/Review, Mobile Security Test/Review, Business Security Review.

All the programs tested are from the reputable and reliable manufacturers. Please note that even the STANDARD level/award requires a program to reach a good standard, although it indicates areas which need further improvement compared to other products. ADVANCED indicates areas which may need some improvement, but are already very competent. Below is an overview of awards reached by the various anti-virus products in AV-Comparatives' main test-series of 2013.

	File Detection Test March 2013	Proactive Test March 2013	Performance Test (AV) April 2013	Real-World Test (March-June 2013)	Anti-Phishing Test July 2013	File Detection Test September 2013	Performance Test (Suite) October 2013	Malware Removal Test October 2013	Real-World Test (August-November 2013)
Kaspersky Lab	***	***	***	***	***	***	***	***	***
Bitdefender	***	***	***	**	***	***	***	***	***
ESET	**	***	***	***	***	**	**	***	***
F-Secure	***	***	***	**	**	***	***	**	**
avast!	**	**	***	***	**	**	***	***	***
BullGuard	***	***	**	**	***	***	**	**	**
Fortinet	**	***	*	**	***	***	*	***	***
AVIRA	***	***	**	**		**	***	***	***
Emsisoft	**	**	**	***	**	***	*	**	***
Sophos	**		***	**	**	***	***	**	***
Panda	**	*	**	**	***	**	**	***	**
eScan	**	**	*	***	**	**	**	**	**
G DATA	**	**	*	***	**	**	*	**	**
Trend Micro	*		**	***	***	***	*		**
Qihoo 360	***		*	***	*	***	***		*
Tencent QQ	***	***		***		**	**		**
McAfee	**		*	**	***	**	*		**
ThreatTrack Vipre	*	tested	**	*	**	**	**	*	*
Kingsoft	***	***	tested	*		**	**		tested
AVG	*		**	**		**	***		*
AhnLab	tested	tested		tested		*	**	**	tested

Key: \* = Standard, \*\* = Advanced, \*\*\* = Advanced+

An empty box indicates that the vendor did not participate in the optional test.

## Winners

Before mentioning this year's award winners, we would like to give readers some advice. If you plan to buy an anti-virus program, please visit the vendor's website and evaluate their software by downloading a trial version, as there are many features and important considerations (e.g. compatibility, graphical user interface, ease of use, price, support etc.) that you should evaluate for yourself.

As explained above, the perfect anti-virus program or the best one for all needs and for every user does not exist. Our winners' categories are based on test results and do not evaluate or consider other factors that may be of importance for specific users' needs or preferences. Being recognized as "Product of the Year" does not mean that a program is the "best" in all cases and for everyone; it only means that its overall performance in our tests throughout the year was consistent and unbeaten.

The Product of the Year award depends on the number of Advanced+ awards received in all our tests. As all products receiving an Advanced+ award are considered (statistically speaking) to be as good as each other, a product can receive the Product of the Year award without necessarily reaching the highest score in any individual test.

## Overall winner of 2013 (Product of the Year)

For AV-Comparatives' "Product of the Year" award, all tests in the public main-test series are taken into consideration. The 2013 Product of the Year award uniquely reached Advanced+ in all tests of this year's series:

### Kaspersky Lab



## Top Rated Products 2013

This year, like last year, a number of products reached a very high standard in all our tests. Although we only have one Product of the Year, we recognise all those products with good overall results by giving them the AV-Comparatives Top Rated award.

We have used the results over the year to designate products as “Top Rated”. Results from all the tests are assigned points as follows: Tested = 0, Standard = 5, Advanced = 10, Advanced+ = 15. Products with 105 points or more were given the Top Rated award, with two conditions. Firstly, any products that failed to win any award (i.e. got 0 points) in either of the Real-World Protection tests have not been considered. Secondly, good results in the performance tests cannot make up for weak results in the detection/protection tests. We intend to give the Top Rated award again next year, but the criteria may be adapted.

**Top Rated products for 2013 are, in alphabetical order:**

**Avast - AVIRA - Bitdefender -  
BullGuard - ESET - Fortinet - F-Secure**



Please see our summary and awards pages – links below:

<http://chart.av-comparatives.org/awardslist.php?year=2013>

## Whole-Product Dynamic “Real-World” Protection winners

Security products include various different features to protect systems against malware. Such protection features are taken into account in the Whole-Product Dynamic “Real-World” Protection tests, which test products under real-world conditions. Products must provide a high level of protection without producing too many false alarms, and without requiring the user to make many decisions.

The figure shown is the average result over the year: **Kaspersky Lab** (99.9%, few FPs), **Emsisoft** (99.2%, few FPs), **Avast** and **ESET** (98.9%, few FPs) all received the Advanced+ award in both tests of 2013.

### AWARDS



For details and full results of the 2013 Real-World Protection tests, please click the link below:

<http://www.av-comparatives.org/dynamic-tests/>

## File Detection winners

The File Detection Test evaluates the static file scanning engine component, which is one subset of the protection features provided by security products. A high detection rate of malware - without causing too many false alarms - is, depending on the situation, one of the most important, deterministic and reliable features of an anti-virus product (as e.g. it is not heavily dependent on infection vectors or other factors).

The following products received the ADVANCED+ award in both overall File Detection tests, in March and September 2013. The figure shown is the average of the two test results: **F-Secure** (99.6%, few FPs), **Bitdefender, Qihoo** (99.4%, few FPs) and **BullGuard** and **Kaspersky Lab** (99.3%, few FPs).

### AWARDS



**F-Secure**



**Bitdefender, Qihoo**



**BullGuard, Kaspersky Lab**

For details and full results of the 2013 File Detection tests, please click the link below:

<http://www.av-comparatives.org/detection-test/>

## False Positives winners

False positives can cause as much trouble as a real infection. Due to this, it is important that anti-virus products undergo stringent quality assurance testing before release to the public, in order to avoid false positives. AV-Comparatives carry out extensive false-positive testing as part of the File Detection Tests.

The products with the lowest rates of false positives<sup>1</sup> during 2013 were **Fortinet** (8), **ESET** (10) and **Kaspersky Lab** (11). These figures represent the SUM of the false positives from both FP Tests.

### AWARDS



For details and full results of the 2013 False Positive tests, please click the link below:

<http://www.av-comparatives.org/false-alarm-tests/>

<sup>1</sup> Microsoft was the actual winner in this category, with 0 false positives, but is out of competition

## Overall Performance (Low System-Impact) winners

Security products must remain turned on under all circumstances, while users are performing their usual computing tasks. Some products may have a higher impact than others on system performance while performing some tasks.

**Sophos, Avast, F-Secure, Kaspersky Lab** and **Bitdefender** demonstrated a lower impact on system performance than other products.

### AWARDS



**Sophos**



**Avast, F-Secure, Kaspersky Lab**



**Bitdefender**

For details and full results of the 2013 Performance tests, please click the link below:

<http://www.av-comparatives.org/performance-tests/>

## Proactive (Heuristic/Behavioural) Protection winners

The Proactive Test shows how good the heuristic detection and behavioural protection features of the various anti-virus products are (i.e. how good they are at protecting against new/unknown malware) without Internet access against completely new (0-day) malware. A high proactive detection/protection rate must be achieved with a low rate of false alarms.

The following products showed the highest proactive protection rates in the 2013 test: **Bitdefender** (97%, few FPs), **Kaspersky Lab** (94%, few FPs) and **BullGuard** (89%, few FPs).

### AWARDS



**Bitdefender**



**Kaspersky Lab**



**BullGuard**

For details and full results of the 2013 File Detection tests, please click the link below:

<http://www.av-comparatives.org/retrospective-test/>

## Malware Removal winners

A very useful ability for an anti-virus program is removal of malware which has already infected a system.

In this year's test, seven products received the Advanced+ award, the very best of these being **Kaspersky Lab**, **Bitdefender** and **AVIRA**:

### AWARDS



For details and full results of the 2013 Malware Removal test, please click the link below:

<http://www.av-comparatives.org/removal-tests/>

## Anti-Phishing Protection winners

Phishing websites attempt to steal money from their victims without making any changes to the computer or device being used to access them. A security product that warns of known/suspected phishing sites can protect the user from fraud.

The products with the highest blocking rate of phishing websites were **ESET, Kaspersky Lab** (99%), **Bitdefender, Trend Micro, McAfee** (98%) and **Fortinet** (97%).

### AWARDS



**ESET, Kaspersky Lab**



**Bitdefender, McAfee, Trend Micro**



**Fortinet**

For details and full results of the 2013 Anti-Phishing test, please click the link below:

<http://www.av-comparatives.org/anti-phishing-test/>

## User-Interface Review Section

The program reviews in this section do not have any effect on the awards. They are intended to give users an idea of what each program is like in everyday use. We hope that this, together with the results of the tests, will help readers find a security program that meets their needs; nonetheless, we strongly recommend potential buyers of any of the programs in this report to evaluate the software themselves by using a free trial version. Other factors that should be considered before purchase include compatibility, price and technical support.

The programs were tested for this year's review on a Lenovo ThinkPad Twist 3347 running Windows 8 64-bit. This is a hybrid device; it is essentially a normal ThinkPad laptop, with a touchscreen display that can be rotated through 180° and folded back over the keyboard, effectively transforming the device into a tablet. This allowed us to test suitability of the programs for use with a touchscreen device.

Whilst we assume that the vast majority of our readers are computer enthusiasts or professionals, the user-interface review primarily considers how easy each program is to use for non-expert users. Our Real-World Protection Test demonstrates that in some cases, a security program will only protect the PC if the user makes the right decision – it is possible to allow the malware to run. Additionally, if a program is out-of-date or a protection component is disabled, the computer will not be protected unless the user is made aware of the problem and provided with a simple means of rectifying it. We thus feel that if a security program is to provide effective protection for the average user, it must either carry out actions automatically, or make it clear to the user what needs to be done, without requiring any decision-making or specialist knowledge. We hope our feedback will be helpful to vendors in optimising their products. Equally, we are sure that many of our readers will provide IT support for non-expert family members, friends and customers, and we aim to help them decide which products will be easiest for their supported users to operate.

Our everyday-usage report looks at the following aspects of the security programs in our tests:

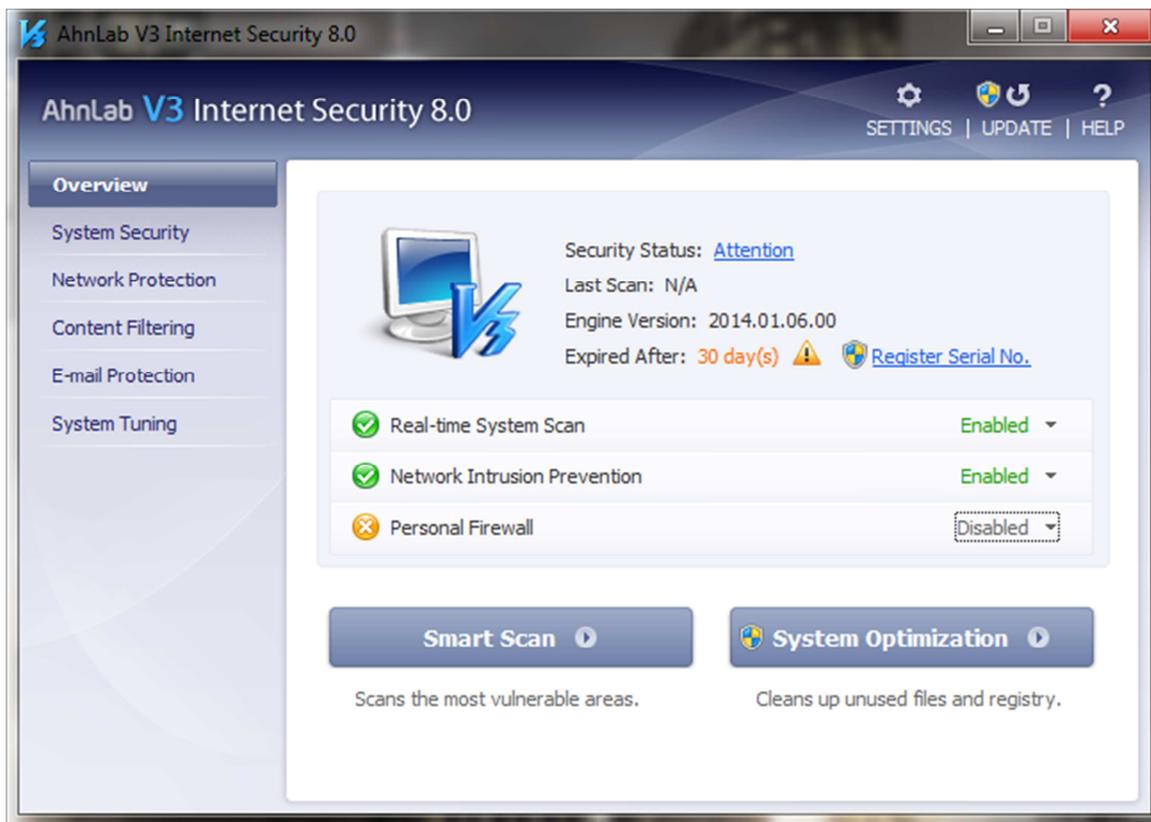
- Are essential functions and information easy to find in the user interface? We look for system status, scan, update (where applicable), subscription status (where applicable), help and logs.
- Does it warn appropriately in the event that the real-time protection or firewall (where applicable) is disabled, and make it easy to rectify this?

- Windows Action Center: does it register appropriately, disable Windows Defender, and allow Action Center to display its normal warnings if firewall (where applicable) or antivirus components are inactive?
- Standard-User Access: can protection be disabled with a non-administrator account?
- Malware alerts: Does the program show clear and appropriate warnings when threats are found? We use the AMTSO<sup>2</sup> Drive-by-Download, PUP, Cloud Protection and Phishing Tests, in both Desktop and Modern Modes of Internet Explorer. Please note that this is NOT a detection test, and we do not consider it a fault if a program does not recognise all of these tests. If available, we include a screenshot of a user-dependent decision from AV-Comparatives' most recent Real-World Protection Test. We also check the reaction of the program's real-time protection when it discovers real Wildlist malware on a USB flash drive.
- Touchscreen use: can the most basic functions be carried out on a touchscreen device? We try to run an update, scan a flash drive, dismiss a malware alert, and reactivate real-time protection after this has been disabled, using a finger.
- Help: We look for a local help function, online knowledge base, and downloadable manual. Where a search function is available, we search for instructions on scheduling a scan and setting scan exclusions.

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<sup>2</sup> <http://www.amtso.org/feature-settings-check.html>

## AhnLab V3 Internet Security



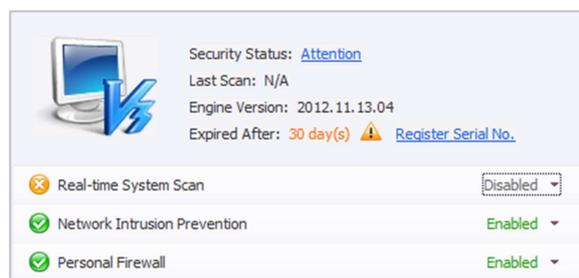
Note: AhnLab V3 was reviewed on Windows 7

### Installation and interface

The only installation options are the installation folder location, and whether to install Ahnlab's own firewall. We found setup to be quick and easy.

AhnLab V3 Internet Security 8's main program window consists of a left-hand menu column, and a larger main pane on the right. The title bar also includes Settings, Update and Help buttons. There is an overall status display, although this is only in the form of one word in small text at the top of the main pane, reading either "Secure" or "Attention". Clicking on "Attention" opens the protection settings dialog, from which individual components can be activated or deactivated, or returned to the default configuration by clicking the appropriately named button. The

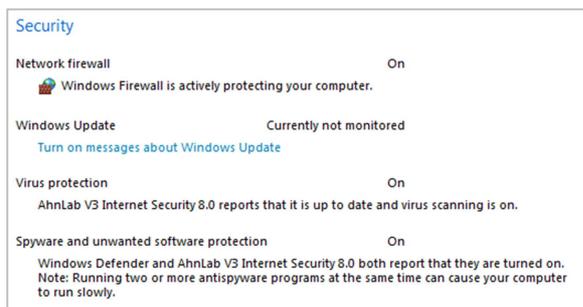
main program window also has status lines for 3 of the individual components, namely Real-time System Scan, Network Intrusion Prevention, and Personal Firewall; each of these has a little tick (checkmark) icon on green if it is activated, or a cross on yellow if not:



Overall, we found AhnLab V3's program interface to be simple and effective, although a somewhat bigger and more obvious status display/Fix-All button might be helpful.

### Windows Action Center

AhnLab V3 Internet Security 8 registers in Windows Action Center as an antivirus and antispyware program. The suite’s own firewall is deactivated by default, and Windows Firewall remains active:



When real-time protection is disabled, Windows Action Center displays its normal full alert:

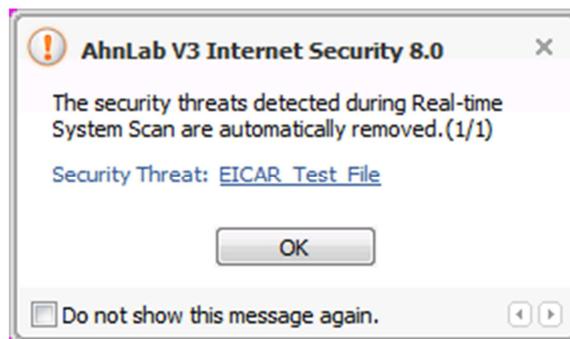


### Standard-user access

When we logged on to our test PC with a non-administrator account, we were able to deactivate the real-time protection without any sort of hindrance. We feel that this is not ideal, especially for a family PC.

### Malware warnings

When we attempted to download the EICAR test file, AhnLab Internet Security blocked the download and displayed the warning message shown below:



The suite reacts in the same way when malware is discovered locally by the real-time protection. The PUP test file was blocked silently; the Phishing and Cloud Protection Tests were not recognised. We felt that the malware alert was essentially simple and clear, although it would be clearer to write “have been removed”.

### Suitability for touch

Running an update and a quick scan are both very easy, as big buttons are provided for both tasks. The process for reactivating protection when it is disabled is also very easy to use with a finger. Scanning a flash drive is possible, but rather more fiddly, as the task uses controls that are definitely mouse-oriented:



### Help and Support

There is a comprehensive, 120-page manual for AhnLab V3 Internet Security 8 available for download on the AhnLab website. It has been very professionally produced, with all sections accessible with one click from the contents page or Adobe Reader’s bookmarks bar. The manual covers system requirements, installation, configuration and maintenance. It has been logically organised and well

written. Our one suggestion for improvement would be to put in more screenshots, as there are only a handful in the entire manual.

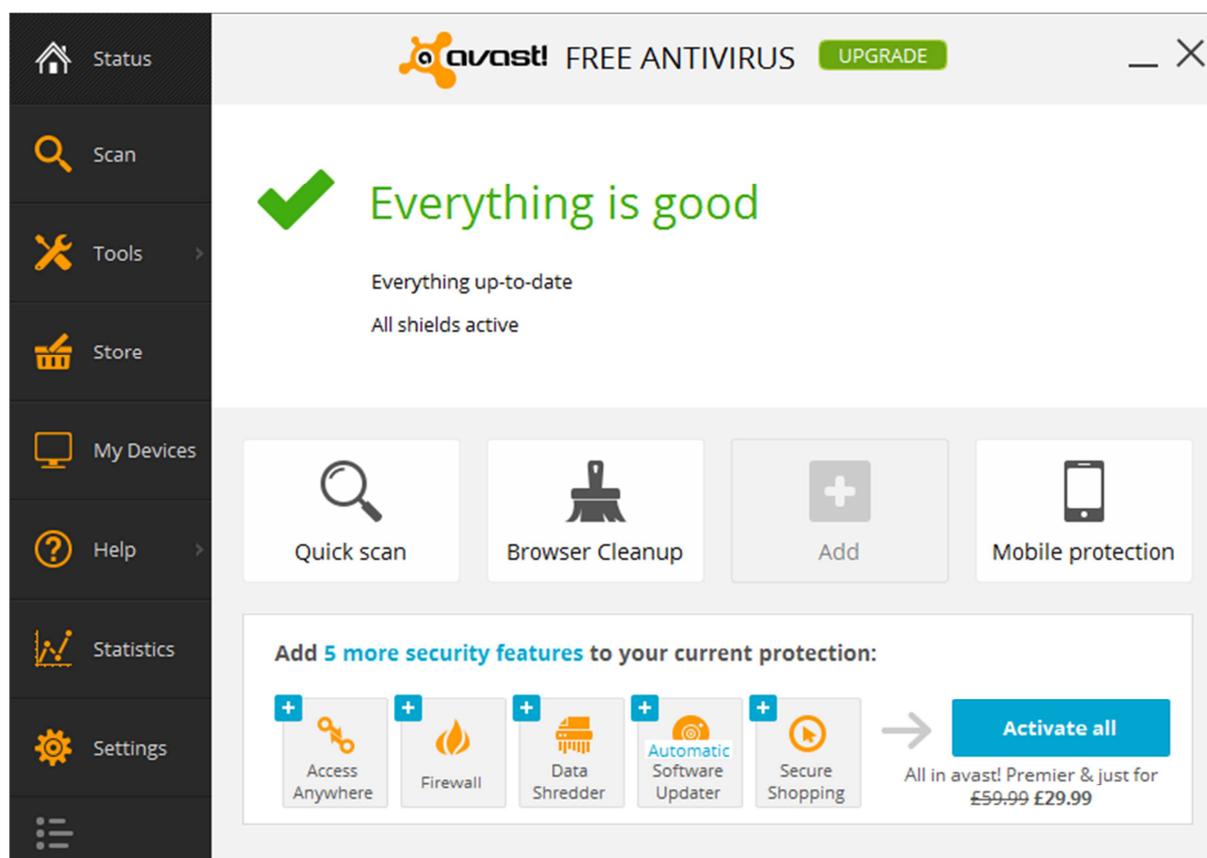
Clicking the Help button on the program window opens the online help function in a browser window (there is no local help function). The content appears to be identical to that of the manual, although broken down into individual pages, with an index pane on the left, and a search function. We were quickly able to find answers to our queries on

scheduling a scan and setting scan exceptions.

### *Summary*

We found AhnLab V3 Internet Security 8 to be largely simple and straightforward to use. The program interface makes it easy to find important information and functions. We would however suggest that it would be better to prevent non-administrator accounts from disabling protection features.

## avast! Free Antivirus



### Installation and interface

avast! Free Antivirus offers a custom installation option, which allows users to select the sub-components of the product and multiple UI languages, ideal for multilingual families. The humorous Pirate Talk “language” is included.

The system status (text and graphic), scan function, help and logs are all easily visible in the main program window. The manual update function is located under Settings, which we did not find very obvious; however, regular updates are carried out automatically. Subscription status is not relevant as the program is free.

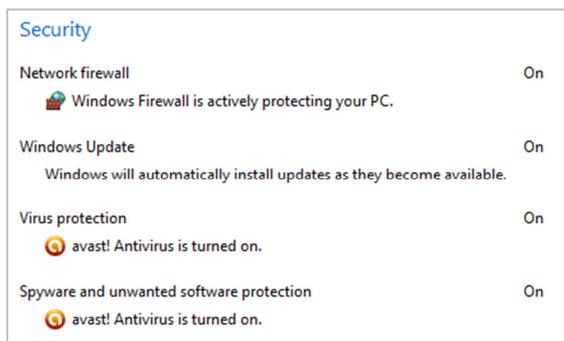
If real-time protection is disabled, the status display changes to make this apparent. There is a link to activate the individual component concerned, and a Resolve All button which rectifies any and all problems.



With the one minor exception of the manual update function, we found the main program window of avast! Free Antivirus to have a very simple, clear and practical layout.

### Windows Action Center

The program registers with Windows Action Center as an antivirus and antispyware program:



When the real-time protection of avast! Free Antivirus is disabled, there is no warning from the Windows Action Center tray icon. The avast! tray icon does change, although by default it is hidden from view. We feel that a more obvious warning from one or other of the tray icons would be better.

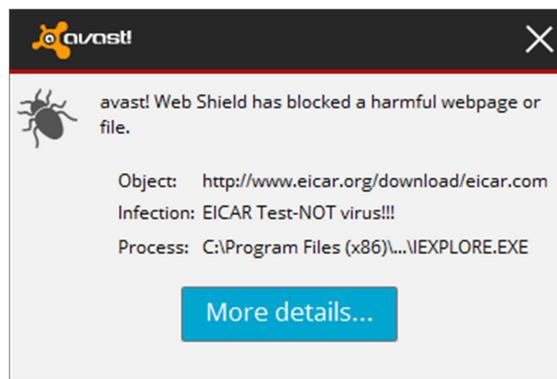


### Standard-user access

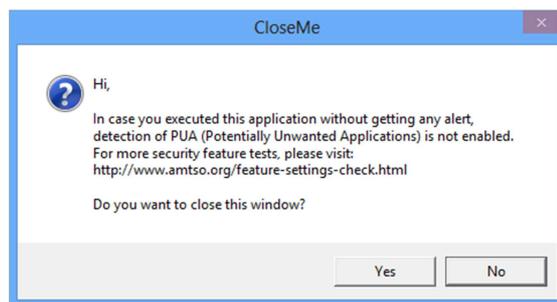
We were able to deactivate the real-time protection of avast! Free Antivirus using a non-administrator account, without any additional credentials being required. We feel that this is not ideal, especially for a family computer, and encourage avast! to change it.

### Malware warnings

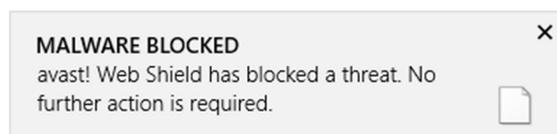
In response to the AMTSO Drive-By Download Test, avast! produced the following warning in Desktop Mode:



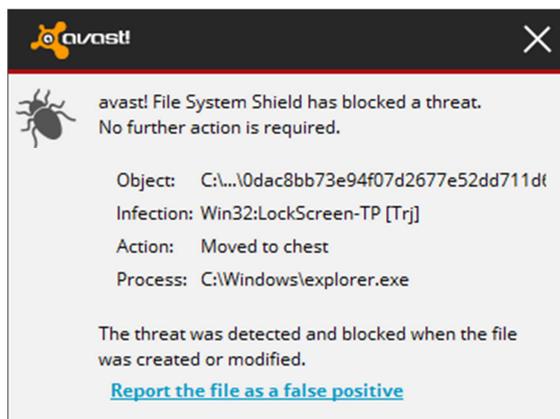
A similar warning is displayed for the Phishing and Cloud Protection Tests. The Phishing Test page was also blocked. However, the Potentially Unwanted Program Test was not blocked, and ran without any notification from avast! – despite the manufacturer officially supporting this feature:



When using Internet Explorer in Modern Mode, we found that avast! displayed warning messages in the appropriate format:



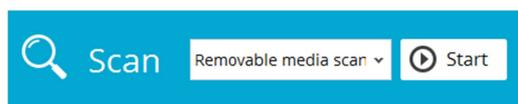
When its real-time protection detected malware on a flash drive, avast! displayed the following dialog box:



We found avast's malware warnings to be clear and simple. The desktop real-time and Modern-Mode messages state "No further action is required", which is particularly reassuring.

### *Suitability for touch*

The design of the program's main window indicates that it is designed for use with touchscreens, as the big buttons are obviously very finger friendly. We also found that the menu items on the left, and all the controls for carrying out basic tasks (update, scan, reactivate protection, dismiss virus warning), worked very well with touch. This includes scanning a flash drive, using the Removable Media Scan option:



### *Help and Support*

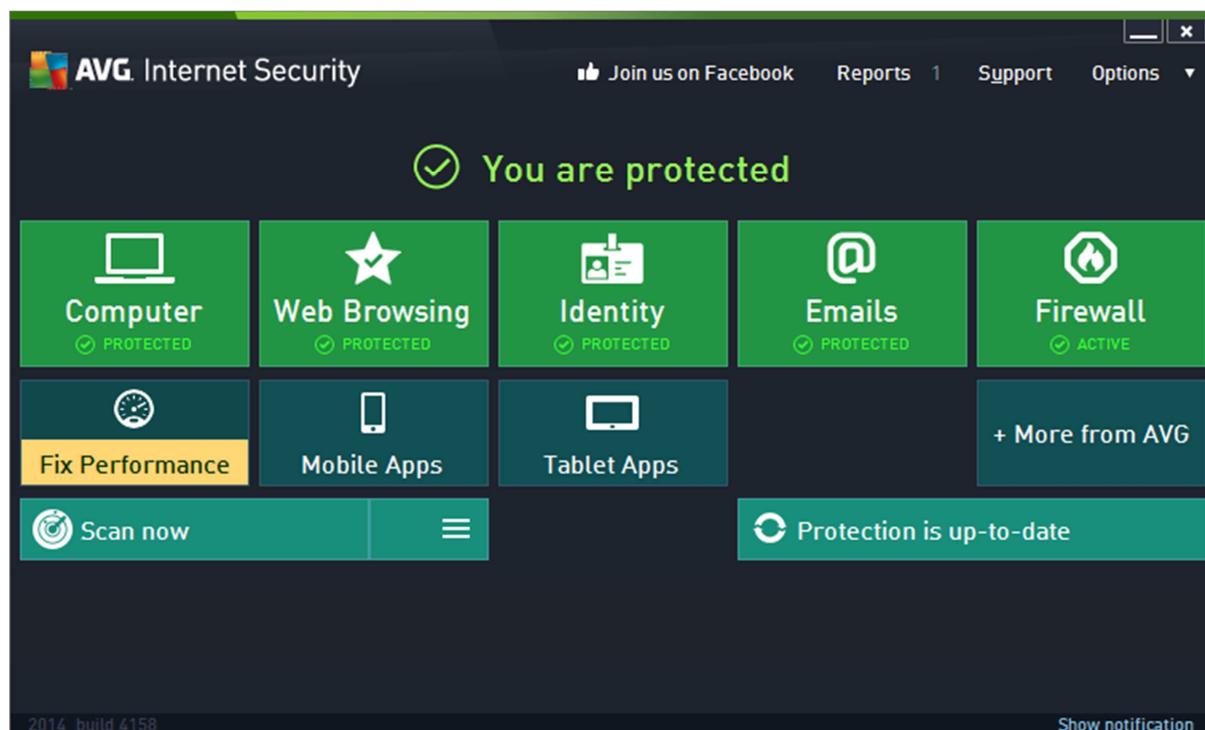
Clicking Help | Support in the main program window opens a page with a variety of relevant options, including Program Help and FAQs. Program Help is a local service using the traditional Windows Help interface. As with last year's product, the pages within the local help explain what is available on a particular page of the program, but not how to get there, which we feel might be a cause of frustration for some users. At the time of writing, we could not find a manual for avast! Free Antivirus 2014, only for older versions of the program, and the FAQs also appeared not to have been updated for the new product.

### *Summary*

avast! Free Antivirus has a very simple and clear interface which works well in both Desktop and Modern Modes of Windows 8, and can easily be used with either touchscreen or mouse and keyboard. We suggest one improvement: disabling the program's protection should only be possible with an administrator account.

Website: <http://www.avast.com>

## AVG Internet Security

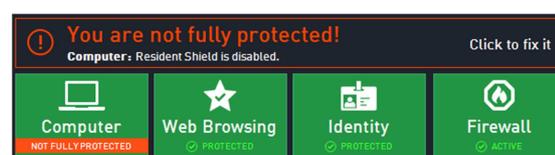


### Installation and interface

AVG's installer has a custom installation option, which allows selection of components and interface languages; multiple languages can be installed, and each user can select their own interface language. AVG's safe search service and browser add-on are optional.

System status as text and icon, plus scan and update functions, are easily accessible directly from the home page of the program. Subscription status, help and logs can all be accessed from the Options menu; we did not find this especially intuitive, and might have expected to find help and subscription information in the Support menu.

If the firewall or real-time protection is disabled, the status display text and icon change, and the relevant tile also shows a warning. There is a "Click to fix it" button, which will instantly rectify the problem:



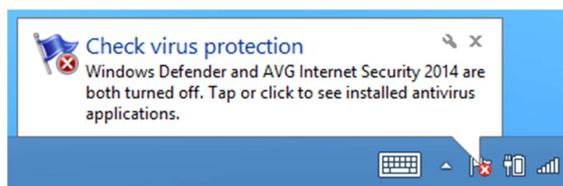
We find the interface of AVG Internet Security largely very clear and simple, with the most important functions and information clearly displayed. Subscription status and help might be a little easier to find.

### Windows Action Center

AVG Internet Security registers with Windows Action Center as the firewall, antivirus and antispyware programs:



If real-time protection is disabled, Action Center displays its normal warning message:



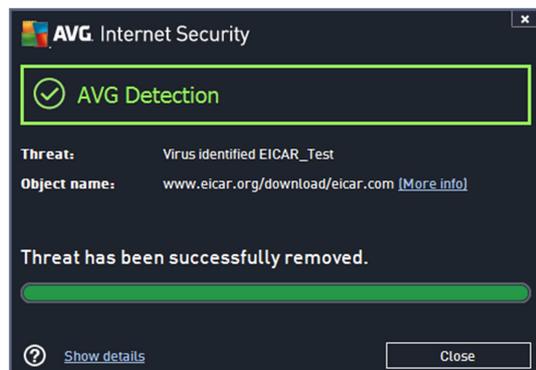
However, if the AVG firewall is disabled, there is no warning at all from Action Center, which continues to state "AVG Internet Security is currently turned on". There is a discreet warning triangle displayed on AVG's own tray icon, although by default this icon is hidden.

### Standard-user access

When we attempted to disable real-time protection whilst logged on with a non-administrator account, a Windows User Account Control dialog was displayed, prompting for administrator credentials. Unless these are entered, the protection cannot be deactivated. We find this ideal.

### Malware warnings

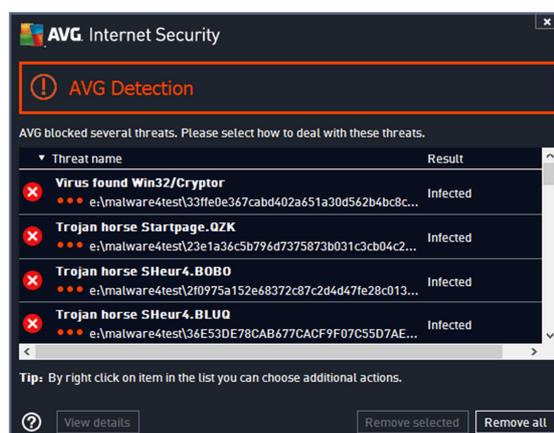
AVG produced the following alert for the EICAR test file:



The phishing test alert was similar. For the PUP and cloud protection tests, an alert appeared in the browser:



No alerts were shown when we used Internet Explorer in Modern Mode. All the tests were blocked silently. When AVG's real-time protection detected malware on a flash drive, the following alert was shown:



The following screenshot comes from AV-Comparatives' Real-World Protection Test, September 2013, and represents a user-dependent case:



Please note that the default option (i.e. what happens if the user presses Enter on the keyboard) is to remove the threat; it is however possible to allow the program to run.

Overall, we found AVG's malware alerts to be very clear and appropriate. The user is always informed whether any action is necessary or not, and if it is, the recommended action is clear and easy to carry out.

### *Suitability for touch*

Both the update button and "Click to fix it" button, used to reactivate disabled protection components etc, are very finger friendly. Whilst running a full scan is equally easy with a touch screen, scanning a flash drive involved tapping a very small box in the middle of a folder list obviously designed for use with a mouse:



### *Help and Support*

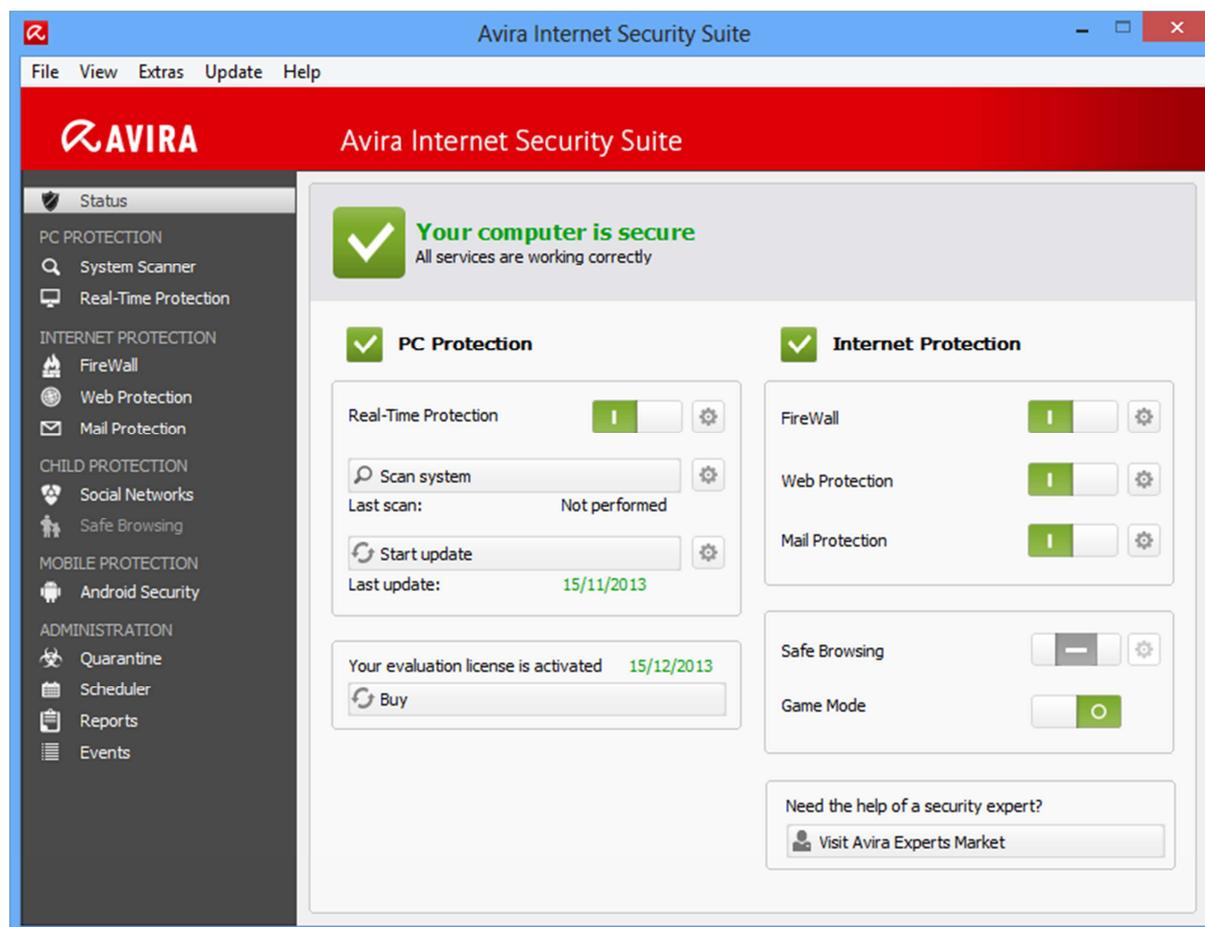
The Help Contents item in the Options menu opens a traditional Windows Help file for AVG Internet Security. This covers a wide range of topics, and we easily found answers to our standard queries on scheduling a scan and setting scan exclusions. We note that there are links on each page to instructions for finding the dialog box concerned, which we find very helpful. Clicking Support provides an option to "Visit FAQs"; this opens the FAQ page of AVG's website. There are clear and simple instructions here for a number of tasks, including downloading and installing the program; this includes a narrated video of the entire process. Other articles for simpler tasks, such as uninstalling the AVG Nation browser add-on, are illustrated with screenshots. Finally, AVG produce a comprehensive 127-page manual for Internet Security 2014. This covers installation, configuration and use of the product. It is clearly written, well illustrated with screenshots, has a clickable index page and has been bookmarked. Overall, we would describe AVG's help services as excellent.

### *Summary*

Once again, AVG has produced a very user-friendly security suite. We liked the choice of components and languages in the installer/uninstaller, and the program window makes the most important functions very accessible, in most cases for touchscreen use too. Malware alerts are very clear and reassuring. Comprehensive and practical help features complete the suite. Our one significant suggestion for improvement would be to enable an Action Center warning if the firewall is disabled.

Website: <http://www.avg.com>

## Avira Internet Security Suite



### Installation and interface

A custom installation is available as an option; this allows components to be selected.

System status is clearly displayed in the form of text and icon at the top of the program window. Scan and Update functions, along with subscription information, can be found in the main pane of the window; logs (Events) are accessible from the left-hand pane, and help functions are available from the Help menu at the top of the window.

When the firewall or real-time protection is disabled, the text and icon of the status display change accordingly, and a "Fix Problem" button appears, which will rectify the situation:

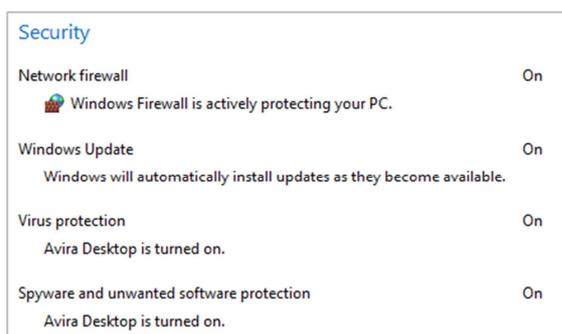


We note that the controls marked FireWall in the interface are a convenient way of accessing the Windows Firewall, which is used by the Avira suite for Windows 7 and later. Overall, we found that Avira's program

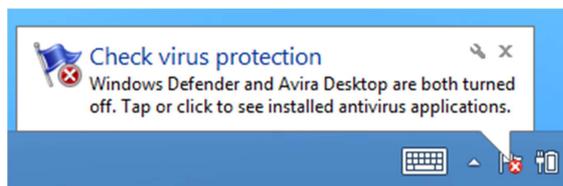
interface makes all the most important functions and information very easily accessible from the main window.

### Windows Action Center

Avira Internet Security Suite registers in Windows Action Center as an antivirus and antispyware program.



If real-time protection or the firewall is disabled, Action Center displays its normal alert:



### Standard-user access

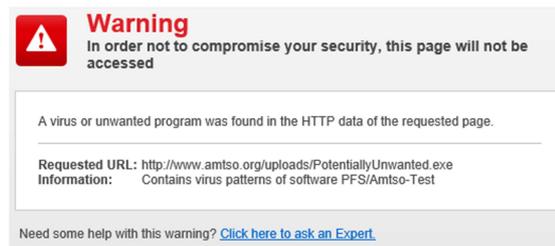
When we attempted to disable real-time protection or the firewall whilst logged on with a non-administrator account, we were confronted with a Windows UAC prompt, demanding administrator credentials. Unless these are entered, the settings cannot be changed, which we find optimal.

### Malware warnings

When we accessed the EICAR Drive-by-Download Test page using Internet Explorer in Modern Mode, the following alert was displayed:

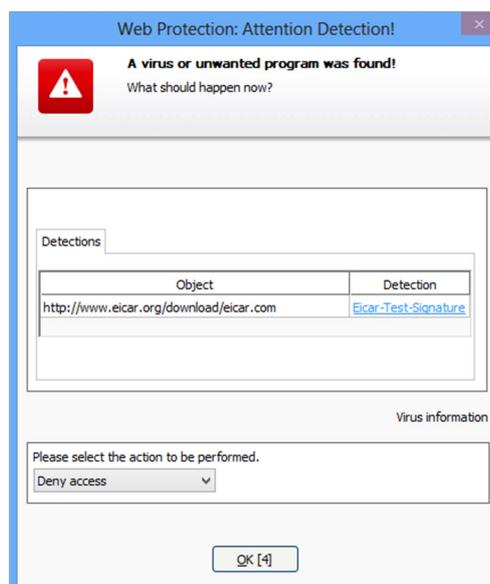


A similar "Windows Modern" warning was shown for the Cloud Protection Test and PUP tests; in addition, the PUP Test also showed a warning page in the browser:

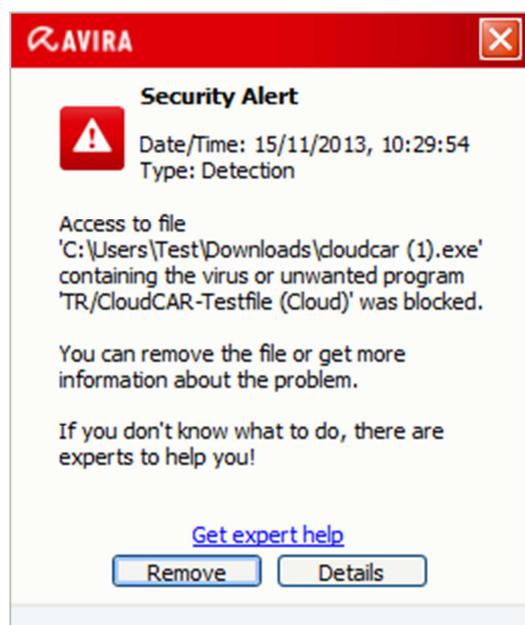


The same type of warning page was also shown for the Phishing Test page. Avira Internet Security Suite makes full use of Windows 8's notification system to inform the user of all malware/phishing detections when surfing the web in Modern Mode, which we find excellent. These alerts do not inform the user whether any further action is necessary, however.

In Desktop Mode, the following type of warning was shown for the EICAR Drive-by-Download and PUP tests:



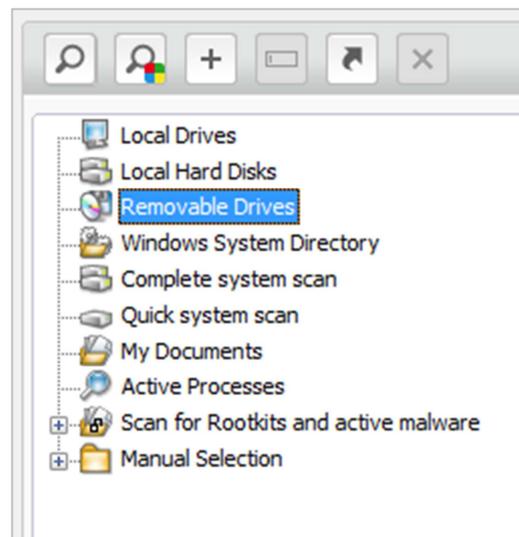
If the user does not take action within 10 seconds, the default action (deny access) is carried out. A different type of alert was displayed for the Cloudcar file (Cloud Protection Test) and real-time detection of malware on a flash drive:



We feel that the second type of alert message is better, as the default action is to remove the threat; other actions are only available by clicking Details. In both cases, we feel the message (box) could be simplified somewhat, to be clearer to non-expert users.

### *Suitability for touch*

Updating the program and reactivating the protection if disabled are both easily performed on a touchscreen. Malware alerts in Modern Mode use Windows 8 notifications, which are very finger friendly. Only scanning a flash drive turned out to be rather fiddly on a touchscreen, as the item has to be selected from a list that was designed for use with a mouse:



### *Help and Support*

The program's Help menu contains the entry "Download Manual", which would appear very convenient. Unfortunately, the link leads to the page for the previous version – we would encourage Avira to rectify this. The correct manual is in fact fairly easy to find on the website. It is very comprehensive at 238 pages, and covers all aspects of installing, configuring and using the suite in detail. There is a clickable contents page and the document has been well bookmarked and illustrated with screenshots. A traditional Windows Help file is also available, with similar content to the manual. We were easily able to find answers to our queries on scan exclusions and scheduling a scan.

Finally, there is an online knowledgebase. This displays about a dozen FAQs and has a search function for other questions. This enabled us to find very brief, unillustrated instructions on setting scan exclusions, but unfortunately drew a blank with "Schedule scan".

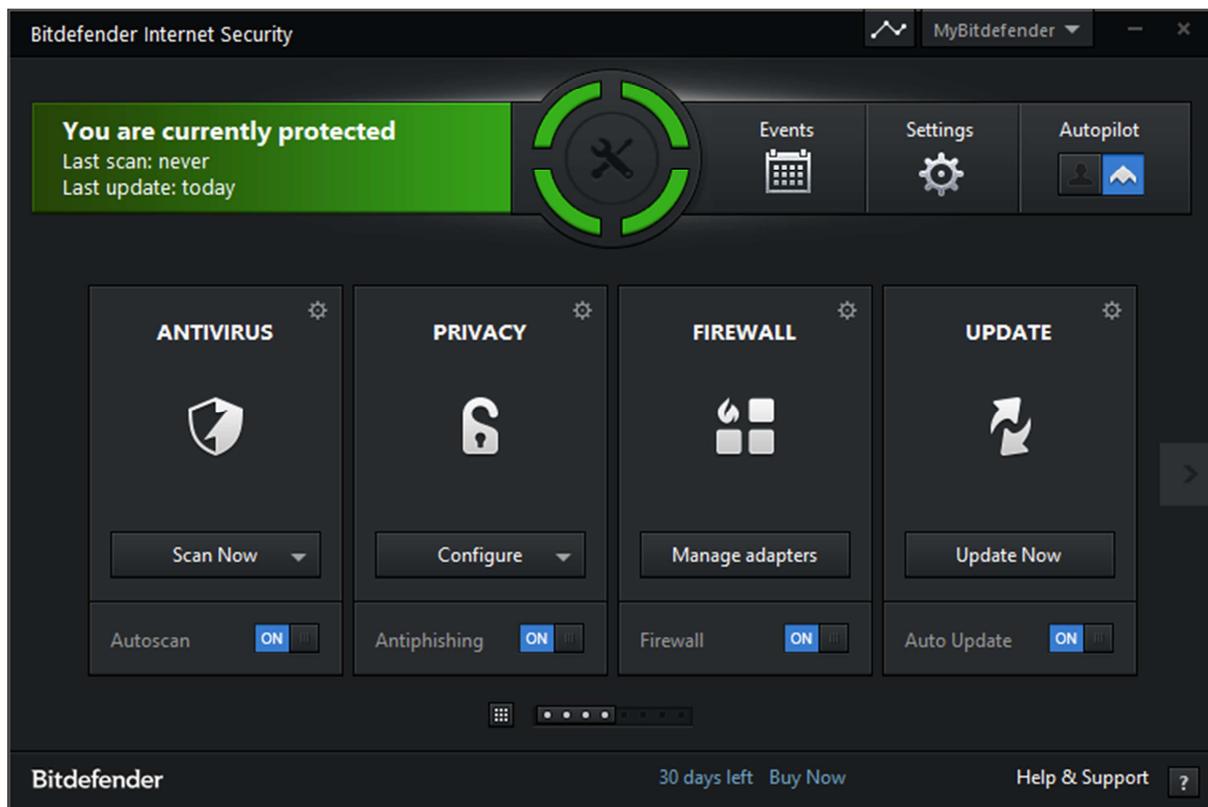
Overall, we would describe the help features of Avira Internet Security Suite as very good.

## *Summary*

Avira's program interface makes all important features and information easily accessible. Malware warnings appear in Modern Mode as well as Desktop Mode, and comprehensive documentation is provided. Suggestions for improvement are only very minor: simplified alerts in Desktop Mode, and more finger-friendly flash-drive scanning.

Website: <http://www.avira.com>

## Bitdefender Internet Security

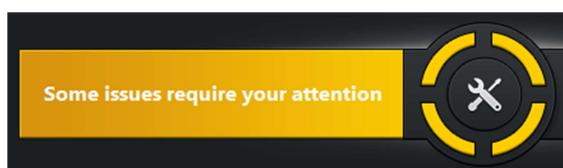


### Installation and interface

Installation is very simple, with installation folder location and proxy settings being the only options.

System status, update, scan, subscription status, help and logs (Events) are all clearly displayed on the home page of the program window.

If the firewall or real-time protection is disabled, the text and colour of the status display change to show a warning:

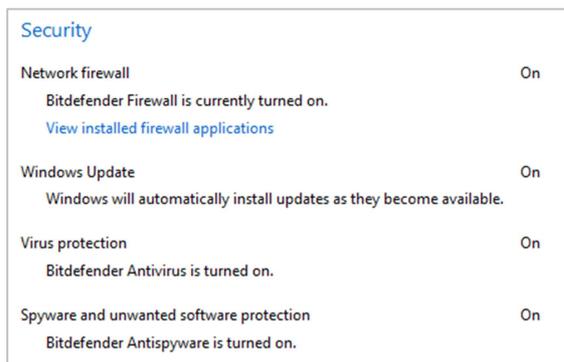


Clicking anywhere in the status display opens a "Fix All" dialog box, from which the protection can be reactivated with a single click.

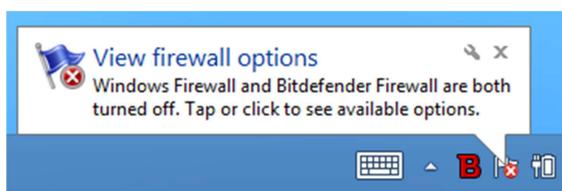
We feel the Bitdefender Internet Security makes all essential features and information very easily accessible.

### Windows Action Center

Bitdefender Internet Security registers with Windows Action Center as an antivirus and antispyware program and firewall:



In the event that real-time protection is disabled, no warning at all is shown by Action Center. However, if the firewall is deactivated, the normal alert is displayed:



We feel that real-time protection is very important, and that an Action Center warning should be displayed if it is not working.

### Standard-user access

When we logged on to our test PC with a non-administrator account, we found that the controls used to deactivate protection components had been greyed out, meaning that protection could not be disabled. We find this ideal.

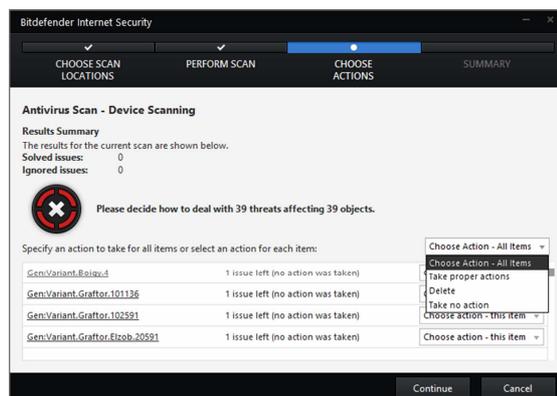
### Malware warnings

We found that Bitdefender Internet Security's reaction to the AMTSO Feature Settings Test were identical for both Modern and Desktop Modes of Internet Explorer. The EICAR Drive-by-Download test is blocked silently, i.e. no alert is displayed. When we attempted to download the PUP test file, the web page was blocked with this alert:



The Cloud Protection Test is not supported, the file is downloaded and no alert is shown. We were surprised to find that we were able to open the Phishing Test page without any warning being shown, as Bitdefender is shown amongst the manufacturers supporting this test.

When malware was detected on a flash drive by Bitdefender's real-time protection, the following dialog box was displayed:



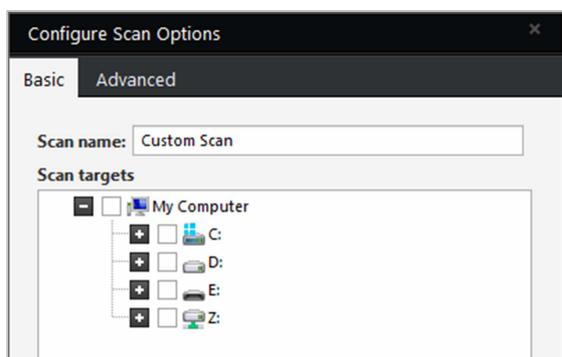
We note that the user is required to take a decision, and that there is no default or recommended action. One of the options is "Take no action". We feel that a better setting would be a default safe option such as quarantine, with the user required to click a single button (at most) to neutralise all potential threats.

We feel that the alert shown for the PUP test is clear, and provides a very obvious safe default action. Otherwise we would suggest that Bitdefender's alerts could be

improved/configured to work with the AMTSO tests.

### *Suitability for touch*

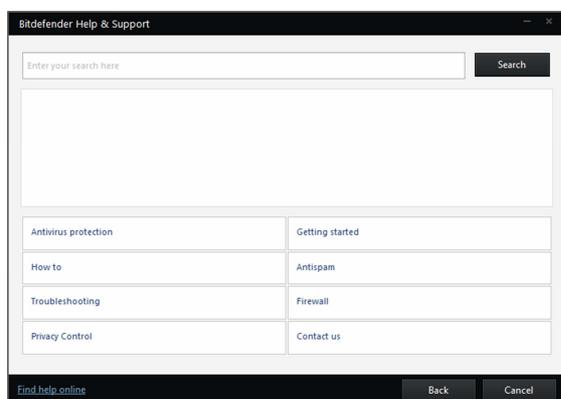
Updating malware signatures is very easy, as there is a big, finger-friendly button on the home page. Scanning a flash drive, is much more fiddly on a touchscreen. The screenshot below shows the drive selection dialog, which was obviously designed for use with a mouse:



The only malware warning that we saw in Internet Explorer's Modern Mode was easy to dismiss, as it is a big button in a web page. Reactivating disabled protection is also easy to do with a finger.

### *Help and Support*

Clicking the Help & Support link in the program window opens the program's own Help window:



This functions as a front end for Bitdefender's html-based local help files. Users can click the links to specific topics in the lower part of the window, or use the search box at the top to look for specific terms. Using this, we were able to find out how to set scan exclusions, but our search for schedule/scheduled scan drew a blank. The instructions for managing scan exclusions were simple and clear, although we could not find any screenshots (other than icons) in any of the instructions.

Additionally, the Support pages of the Bitdefender website include instructions for various tasks. The section on adding exceptions had similar instructions to the local help files, but very well illustrated with screenshots. We also found instructions for scheduling a scan, easily located with the search box at the top of the page. Again, the instructions included abundant screenshots.

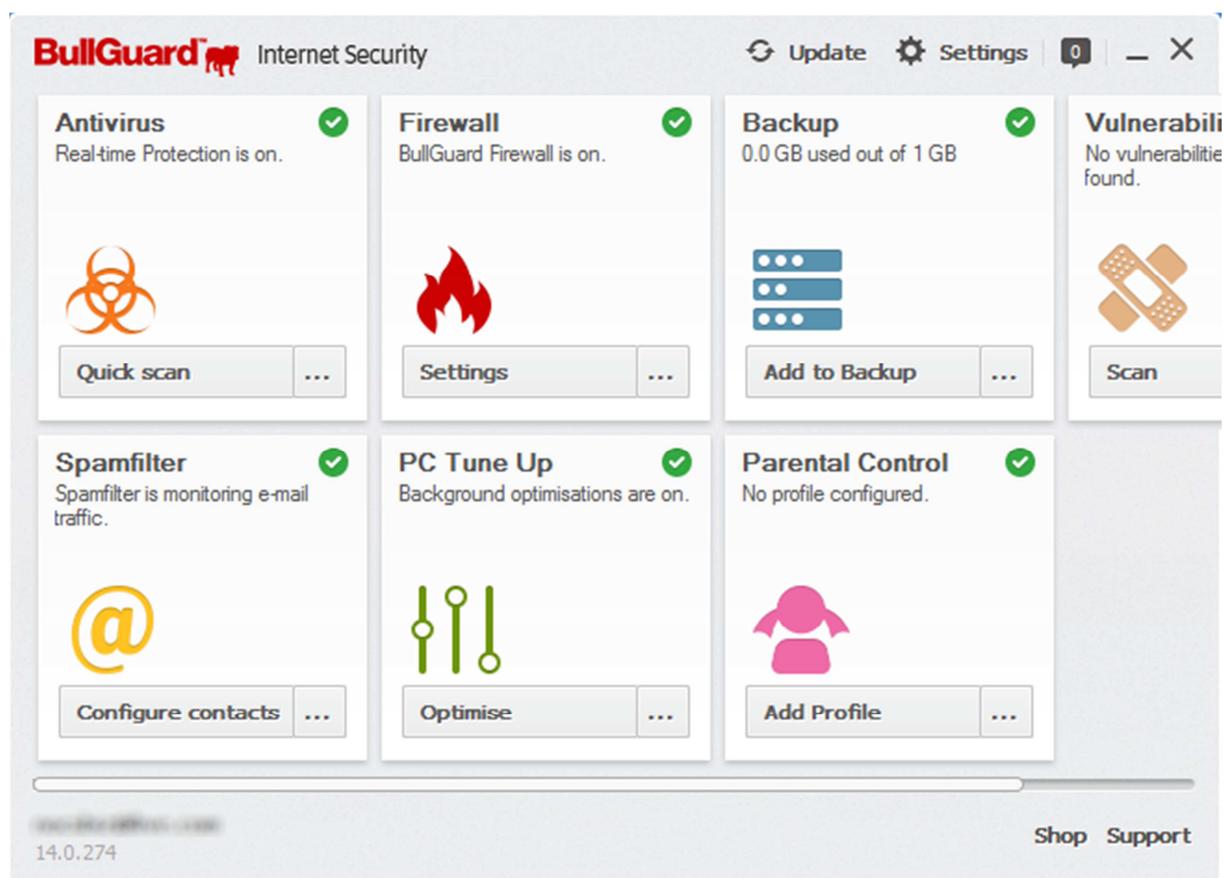
Overall, we would describe Bitdefender's help facilities as good.

### *Summary*

We found Bitdefender Internet Security's interface to be clear and simple, making it largely easy to use. Help functions are good. However, we feel there is some room for improvement with malware alerts.

Website: <http://www.bitdefender.com>

## BullGuard Internet Security

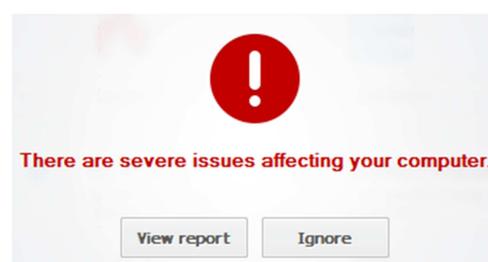


### Installation and interface

Installation is a very quick and simple affair with no options.

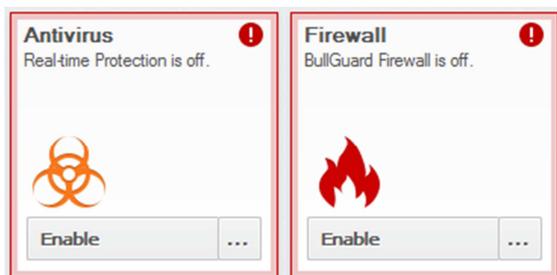
Scan options are available from the button in the Antivirus tile, and there is an update button at the top of the window. There is a Support link in the bottom right-hand corner of the window, which opens the support website for the product. We did not find it especially easy to find logs or subscription status; the former is found by clicking the icon to the right of Settings, while the latter can be found in the Settings dialog.

There is an overall system status display, although if all is well, this is only displayed for a few seconds when the program starts up; the home screen shown in the main screenshot above then appears. Each component has its own status display in the form of text and an icon at the top of its tile. If the firewall or real-time protection are disabled, the following warning is shown when the program is started, and is displayed until the user clicks a button:



Clicking “View report” shows which component(s) is/are disabled, and provides an “Enable” button for each one. If the user clicks “Ignore” on the warning page, the warning will be displayed again the next time the program is opened.

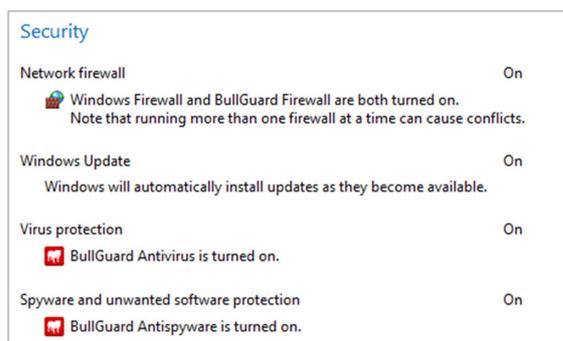
The home screen consists of tiles for the individual components of the screen; these also warn if the respective item is disabled, and the tiles button changes to “Enable”:



Overall, we found the interface to be good, with the most important functions easy to find, a clear warning in the event of a problem, and an easy means of rectifying this.

### Windows Action Center

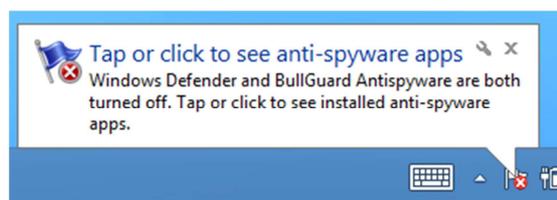
BullGuard Internet Security registers with Windows Action Center as a firewall, antivirus and antispyware program:



We note that Windows Firewall is not disabled, but BullGuard inform us that their firewall integrates with Windows Firewall and does not cause any conflicts. We tried

disabling Windows Firewall, and found that BullGuard protects the PC just as when both firewalls are running.

If real-time protection or both firewalls are disabled, Windows Action Center displays its normal alert:

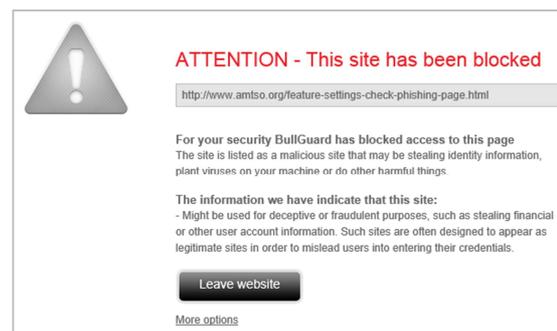


### Standard-user access

When we logged on to our test PC with a non-administrator account and attempted to access the Settings dialog, BullGuard demanded the password for the BullGuard account used to install the program. If this is not entered, the Settings dialog cannot be accessed, so no protection components can be disabled. We find this a very sensible way of protecting the program from unauthorised access.

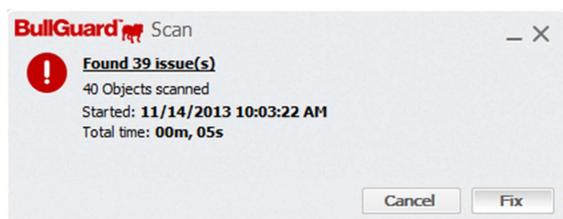
### Malware warnings

BullGuard’s warnings about web-based malware are identical for Desktop and Modern Modes. The EICAR test file, AMTSO PUP and Cloud test files are blocked silently, i.e. there are no alerts, but all of the files are rendered inoperative. For the Phishing Test page, the same alert is shown in both modes:



Clicking on “More Options” allows the user to continue to the page, with the additional warning that this is not recommended.

When we plugged in a USB flash drive containing malware, BullGuard’s real-time protection immediately detected the threats, and displayed the following alert:

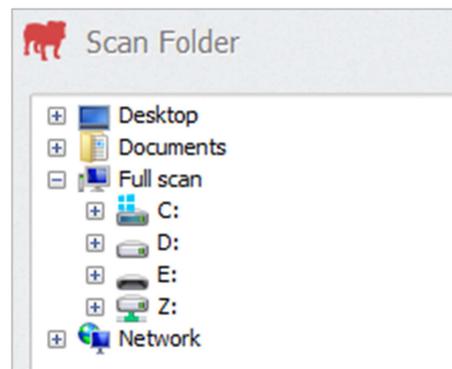


Readers should decide for themselves whether they like silent blocking of web-based malware. Clearly there is no possibility of a user making the wrong decision, though some people might be confused as to why their download has apparently failed.

We found the Phishing Test page warning to be ideal, as the option to proceed to the page is initially hidden. The real-time protection alert includes the Cancel option, which would not seem ideal, although if this is clicked, the malware is deleted on contact anyway.

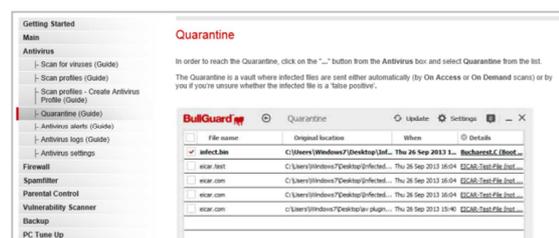
### *Suitability for touch*

Updating signatures using a touchscreen is no problem, as there is a fairly big and finger-friendly link for this. Reactivating protection is not too bad, as the buttons used are more or less big and widely spaced enough. Hitting the Fix button on the malware-found dialog box is also unproblematic. Whilst we note that BullGuard detected malware on a flash drive instantly, without any further action on our part, running a deliberate manual scan would be a bit tricky; the drive selection dialog was clearly designed for use with a mouse:



### *Help and Support*

The Support link in the main program window opens the product’s online support page in a browser. We would describe this as an online manual, systematically going through features and tasks, including installation. It is easy to navigate, thanks to a contents panel on the left-hand side of the page:



Our one reservation about the online help is that we did not find it very easy to search for a particular topic. Our standard searches for scan exclusions and scheduling a scan turned up a considerable number of irrelevant results, including some in other languages. However, we would describe the help feature as good overall.

### *Summary*

We regard BullGuard’s interface as clear and easy to use. The status display and warnings are clear, and the help feature is good. Our one suggestion for improvement would be to improve the search function in the Help.

Website: <http://www.bullguard.com>

## Emsisoft Anti-Malware



### Installation and interface

Emsisoft offers a number of installation options at the end of its setup routine, including a tutorial on how to run a scan, check that real-time protection is on, and how to schedule a scan. These are useful, in our opinion. We also liked its screenshot of Internet Explorer:

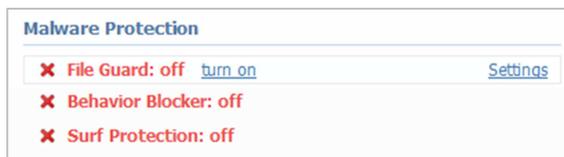


This accompanies its explanation of PUPs (along with the option to detect them), which we found very well-illustrated.

Scan and update functions, subscription status, help and logs are all clearly displayed on the program's home page.

There is no overall system status display. The status of individual components is shown. When all the Malware Protection components are disabled, a Windows Action Center warning appears, but there is no additional warning in the program window itself, or any means of reactivating all the components together.

Disabled protection components can be reactivated by moving the mouse over the component's name; a link entitled "turn on" then appears, and clicking it does precisely that.



We feel that Emsisoft's program window makes almost all essential functions and information easily accessible. We suggest that it is fine for computer professionals and enthusiasts, but an overall status display and Fix-All button would be better for non-expert users.

### Windows Action Center

Emsisoft Anti-Malware registers with Windows Action Center as an antivirus and antispyware program:



If all three components of real-time protection are disabled (File Guard, Behavior Blocker, Surf Protection), Action Center displays its normal alert, and the Emsisoft icon also changes:



However, if only one or two elements are active, no warning is displayed in Action Center or the Emsisoft icon. We feel that the File Guard component is very important, and that a warning should be shown whenever it is deactivated, regardless of the state of other components.

### Standard-user access

Using a non-administrator account, we were able to deactivate all the program's protection features without any additional credentials being required. We do not consider this ideal, especially if the product is to be used on a family computer. Emsisoft inform us that it is possible to restrict access to the settings, either by Windows account or by password.

### Malware warnings

When Internet Explorer is used in Desktop Mode, Emsisoft displays this alert when the EICAR test file is downloaded:



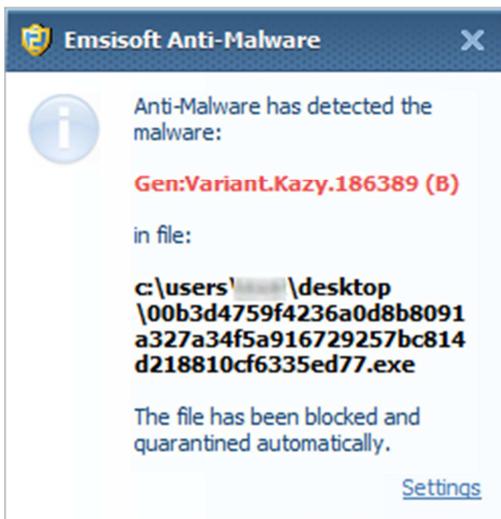
The following dialog box appeared when we attempted to download the AMTSO PUP test file:



The AMTSO cloud protection and phishing page tests are not supported by Emsisoft.

There are no malware warnings shown in Modern Mode, though they appear on the desktop.

When the program's real-time protection detected malware on a flash drive, the following alert was shown:



The following alert comes from AV-Comparatives' Real-World Protection Test, September 2013, and shows a user-dependent case:

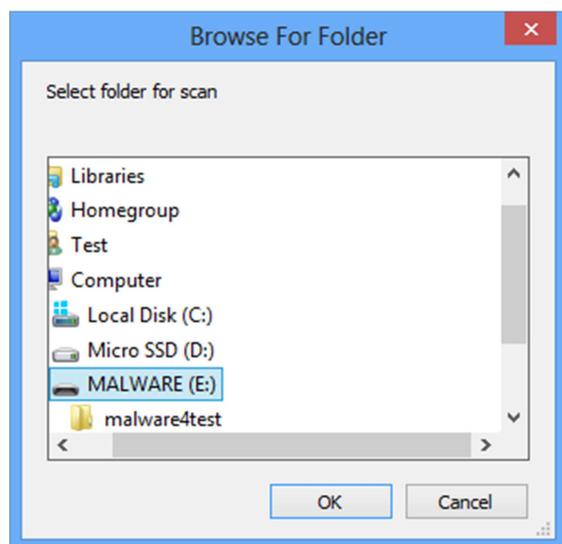


The default action, i.e. what will happen if the user presses the Enter key, is Block. However, we note that there is an option that will allow the program to run.

Overall, we feel Emsisoft's malware make it clear to the user when no further action is needed. In cases where a user decision is required, the default option is safe.

### Suitability for touch

Updating the signatures with a finger is fine, as there is a big button on the home page of the program. Scanning a flash drive is not so comfortable, as the drive has to be selected from a dialog box that was obviously designed to be used with a mouse:



Reactivating disabled protection components using a touchscreen is possible but fiddly.

### *Help and Support*

Clicking the Help button in the program window opens a traditional Windows Help file. We would describe this as being much like a “Quick Start” guide. It covers the essentials of installing, configuring and using the program. The text is clearly written, although there are no screenshots. There is a simple index, which is just a list of the topic headings.

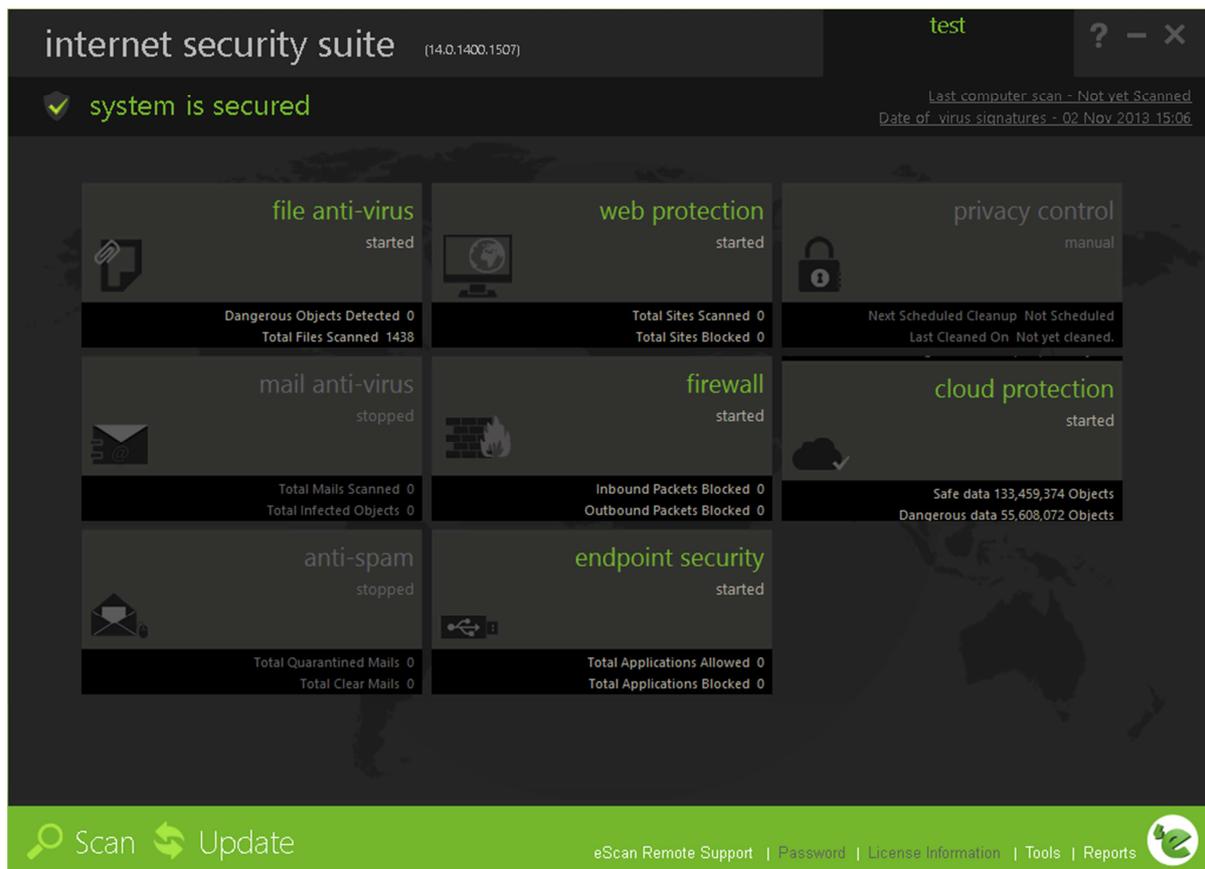
The Emsisoft website has a knowledgebase with a limited number of articles. We used its search function to look for “Scheduled scan”; we felt that the articles found were not relevant (e.g. “Is Emsisoft Anti-Malware fully compatible with other antivirus software”), and the fact that the same answers are displayed in German and Dutch will probably only appeal to linguists. Overall, we would have to describe Emsisoft’s help facilities as basic.

### *Summary*

We feel that confident computer users would find Emsisoft Anti-Malware perfectly satisfactory in everyday use. For someone who knows their way around Windows, and antivirus programs in general, the program is fine. Important data and functions are easy to find, and malware warnings are good. For non-expert users, or those with children, we feel there is some room for improvement. Amongst other things, an overall status display and Fix-All button, along with improved help facilities, would make the program more family-friendly.

Website: <http://www.emsisoft.com>

## eScan Internet Security Suite with Cloud Security



### Installation and interface

Installation is a very simple affair, the location of the installation folder being the only option. We note that Windows Defender is disabled as soon as eScan’s installer is started.

Scan and update functions, system status, license information, help and logs can all be directly accessed from the menu bars at the top and bottom of the window.

When real-time protection is disabled, the status display text and icon change and turn red. However, there is no Fix-All button or similar to reactivate the protection; the user has to figure out what is wrong and put it right manually. Whilst the File Anti-Virus tile

is greyed out and shows “stopped”, this does not stand out clearly, as a number of other components, such as Mail Anti-Virus, are in the same state by default:



Disabling the suite’s firewall did not produce any sort of warning from the program itself; the status display continued to show “System is secured”. Overall, we found the layout

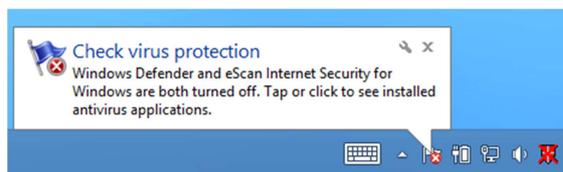
eScan’s new program window to be clear, simple and finger-friendly, but we feel that a firewall warning and a Fix-All button should be added.

### Windows Action Center

eScan Internet Security registers with Windows Action Center as the firewall, antivirus and antispysware programs:



When real-time protection or the firewall is disabled, Windows Action Center displays its normal warning, and the eScan tray icon also shows that the program is disabled:



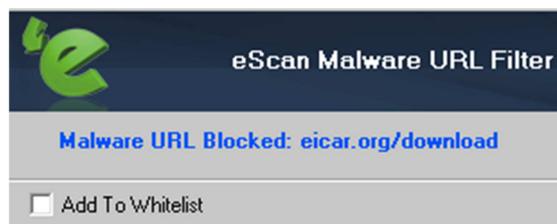
### Standard-user access

If a user with administrator privileges opens the program window in the normal way, options for deactivating protection components will be greyed out. Only if the “run as administrator” command is selected from the Windows context menu will these controls be enabled. A user with a non-administrator account who tries to run the program as an administrator will be met with the User Account Control dialog box, demanding administrator credentials. Unless these are entered, the protection controls will

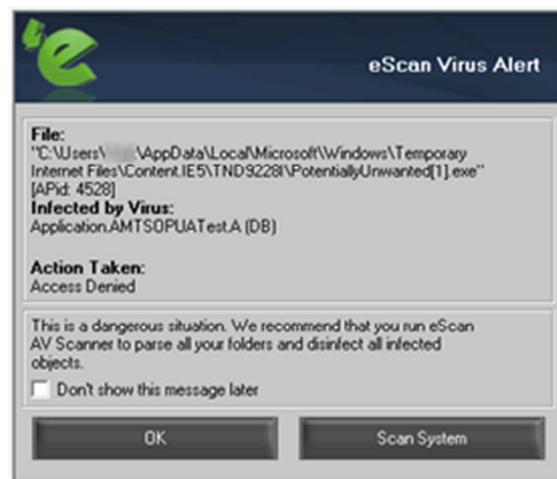
remain greyed out. This not only prevents standard user accounts from disabling protection, but also ensures that administrators cannot deactivate it by accident. This is arguably an excellent default setting.

### Malware warnings

When we accessed AMTSO’s Drive-by-Download test page in Desktop Mode, eScan displayed the following alert:



With the PUP/Cloud test files, eScan provided more information and the option to run a scan:

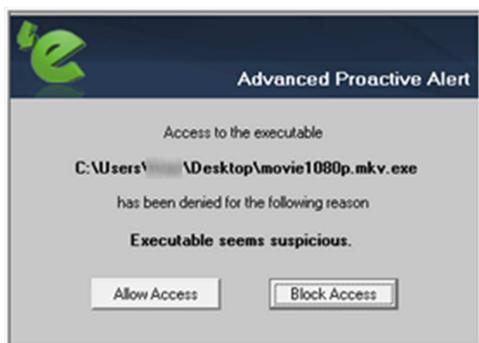


When the program’s real-time protection detected malware on a flash drive, a very similar alert was shown, showing that the malware had been quarantined.

The AMTSO phishing test page was not recognised and no alert was shown.

eScan does not display any alerts in Modern Mode. The EICAR test file, PUP test file and cloud protection test file were all blocked silently.

The alert below was taken from AV-Comparatives' Real-World Test, September 2013, and shows a user-dependent case:

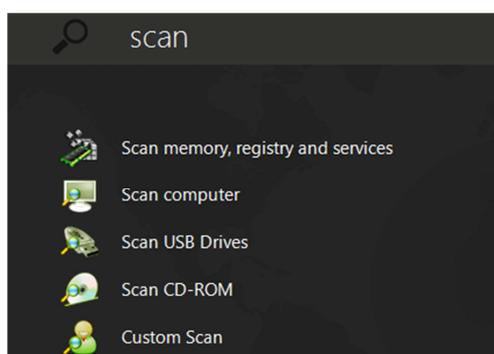


We note that eScan's default action is Block Access, which we consider ideal, though it is possible to allow the program to run. Overall, we consider the malware alerts displayed by the program to be good.

### *Suitability for touch*

We found that all our basic tasks could be carried out on a touch screen without any difficulty.

The scan options are presented as text links, but these are well spaced-out and so easy to operate with a finger:



Updating and reactivating protection use similar text links. We note that both the above tasks require the program to be run as administrator.

### *Help and Support*

Clicking the Help button provides links to a variety of support-related options, including Online Help. Clicking this opens the program's help web page, which provides an introduction to the program's main window. We found this to be rather limited in its scope, but the page also includes a link to the User Guide, a comprehensive 144-page manual in PDF format. This covers installation, configuration and use of the product in detail. It has been well illustrated with screenshots, is bookmarked, and has a clickable contents page, making it easy to find the right page quickly. Using Adobe Reader's search function, we were able to find instructions on scheduling a scan very easily, although we could not find any reference to scan exclusions.

Overall, we would describe the help features as good.

### *Summary*

We found the new interface of eScan Internet Security to be clear, simple and modern, and very suitable for touchscreen use. Malware alerts are good, and we liked the fact that the program must be opened using "Run as administrator" in order to disable protection. The manual is also largely very good. A minor suggestion for improvement would be a Fix-All button to reactivate any disabled protection components.

Website: <http://www.escanav.com>

## ESET Smart Security



### Installation and interface

We installed ESET Smart Security 7 from the 1.5 MB downloader file, which was very quick and simple. The full installation packages include additional setup options.

At the end of the installation process, a dialog box asks whether the current network should be regarded as private or public:



We selected “Home/work network”, in accordance with the pre-existing Windows Firewall settings.

System status, subscription status, scan and update functions and help are all directly accessible from the program’s home page. Logs can be found by clicking Tools in the menu panel on the left.

If the firewall or real-time protection is disabled, the status display changes to show this. There is a text link which can be clicked or tapped to rectify the problem:

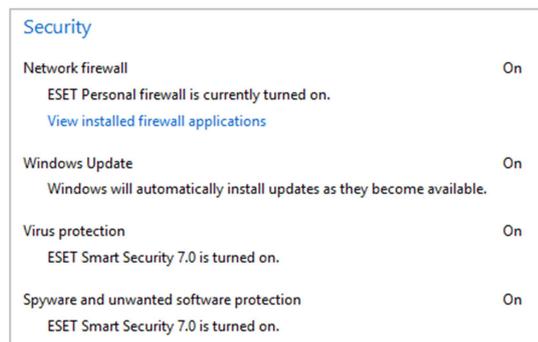


At the time of testing, we noted that clicking this link will reactivate all protection components except for phishing protection. However, ESET inform us that this will be rectified in an update early in 2014.

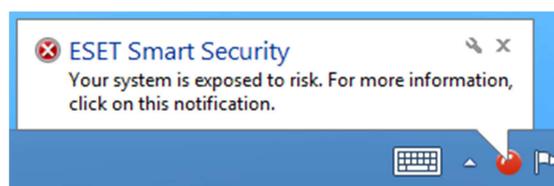
In terms of the user interface, we feel that Smart Security 7 has retained all the simplicity and ease of use found in the previous version of the program.

### Windows Action Center

Smart Security registers in Windows Action Center as a firewall, antivirus and antispyware program:



If the ESET firewall is disabled, Action Center displays its normal warning. If real-time protection is disabled, ESET displays its own similar warning:

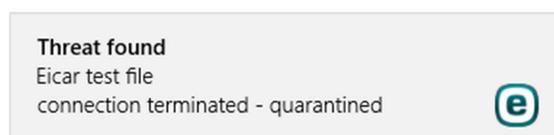


### Standard-user access

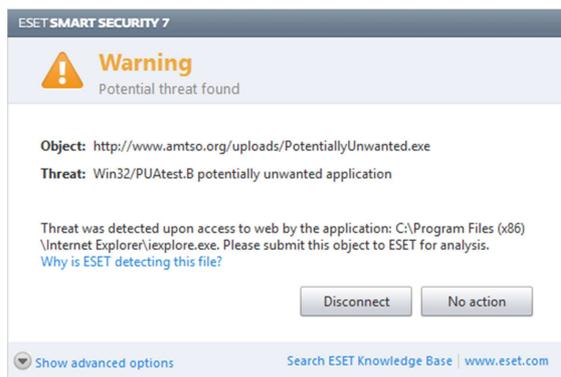
If the user is logged on with a non-administrator account, administrator credentials have to be entered at the AUC prompt before any protection components are disabled. We find this ideal.

### Malware warnings

The following alert was shown when we accessed the AMTSO Drive-by-Download Test page in Internet Explorer’s Desktop Mode:



This warning was displayed for the PUP test file:



We note that there is a “No Action” option; however, when we clicked this, we were still unable to run the file.

Attempting to download the Cloud Protection Test file produced a similar Modern-Style alert to the EICAR test. The Phishing Test page was blocked with the following warning:



Using Internet Explorer in Modern Mode, we found exactly the same alerts as above. In our test, we did not see a warning for the PUP test in Modern Mode, only when switching back to the Desktop.

When ESET’s real-time protection detected malware on a flash drive, the following Modern-Style alert was shown:



We found most of ESET’s malware warnings to be excellent. The Modern-Style alerts work identically in Desktop and Modern Mode, and

make clear that the computer has been protected. Only the PUP Test warning was imperfect, as it can only be seen in Desktop Mode. We suggest a Modern-Style alert showing that the download has been blocked would be ideal.

### Suitability for touch

Although the design of the user interface predates Windows 8, ESET Smart Security turns out to work very well with a touchscreen.

Running an update is very easy, as two big buttons are used. The suite prompts the user to scan a flash drive when it is inserted, and this can be used to scan the drive with a single tap:



Additionally, a flash drive could be scanned easily by tapping “Computer Scan” and then “Removable media scan”. The Windows 8 Modern-Style malware alerts are easily dismissed with a finger, and the link in the status display used to reactivate protection is also easy to tap.

### Help and Support

There is a comprehensive 180-page manual in PDF format covering all aspects of installation (both installer types), configuration and use of the product. It has a clickable contents

page and appropriate bookmarks, making it easy to navigate. It is also well illustrated with screenshots.

There is a local help function in the form of a traditional Windows Help file. This is searchable, and we easily found answers to our standard queries on scan exclusions and scheduling a scan. Some articles are even illustrated with screenshots.

Finally, there is an online knowledge base on ESET's website. This is searchable, and provides very good answers with annotated screenshots:

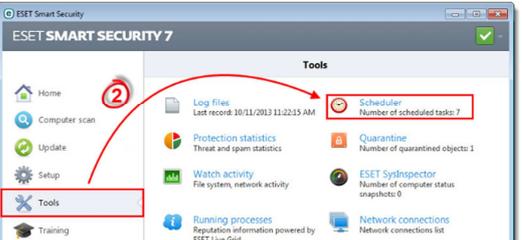
**How do I create a scheduled scan in ESET Smart Security or ESET NOD32 Antivirus?**  
KB Solution ID: SOLN3207 | Last Revised: October 16, 2013

**Issue**

- Schedule a weekly in-depth scan of your system (recommended)

**Solution**

- Open ESET Smart Security or ESET NOD32 Antivirus. How do I open my ESET product?
- Click **Tools** → **Scheduler**.



The screenshot shows the ESET Smart Security 7 interface. The 'Tools' menu is highlighted with a red box and a red circle containing the number '2'. A red arrow points from the 'Tools' menu to the 'Scheduler' option in the 'Tools' pane, which is also highlighted with a red box. The 'Scheduler' option shows 'Number of scheduled tasks: 7'.

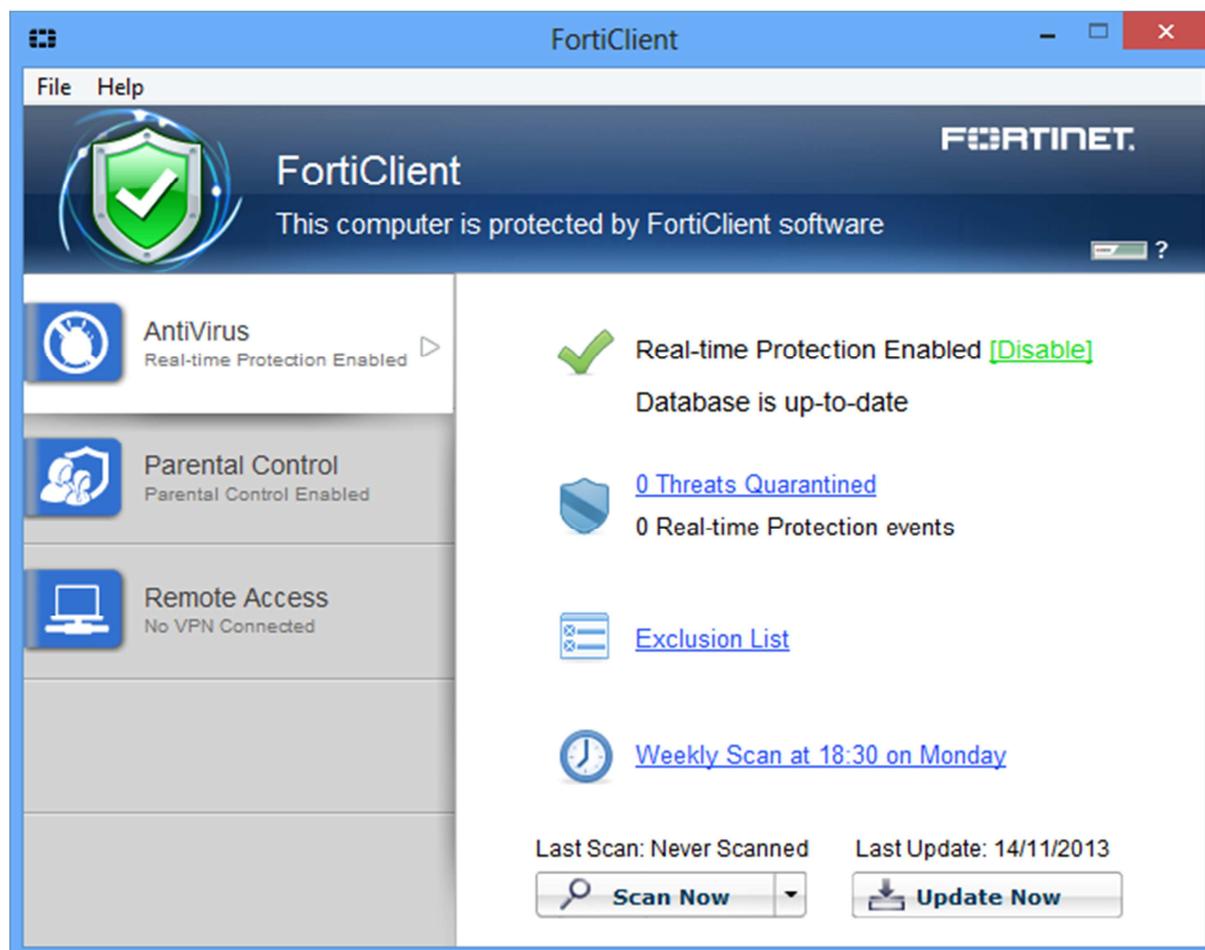
Overall, we would describe ESET's help facilities as exemplary.

## Summary

We found the interface of ESET Smart Security 7 to be excellent. The program is, in our opinion, very clear and easy to use, even on a touchscreen device. Malware alerts are mostly very simple but appropriate, and Help functions are outstanding. A very minor suggestion for improvement would be to implement a Modern-style alert for potentially unwanted programs.

Website: <http://www.eset.com>

## Fortinet FortiClient



### *About the program*

Fortinet FortiClient is principally intended for use in business networks, so its interface etc. may differ from programs aimed at the consumer market. In the second Real-World Protection Test this year, the program was tested in conjunction with a FortiGate appliance, which provides cloud-based behavioural analysis.

### *Installation and interface*

Installation is very quick and simple, the location of the installation folder being the only option.

System status is shown clearly as text and graphic at the top of the program window. Scan and update functions have very obvious buttons, while help is available from the Help menu. Logs can be seen by going into the Settings and exporting the log as a text file. We could not find a means of accessing subscription information from the program window, though this is perhaps not surprising considering the product is intended for business use.

When real-time protection is disabled, both the text and icon in the status display change to warn the user:



Protection can easily be reactivated by clicking the Enable link.

### Windows Action Center

FortiClient registers as an antivirus and antispyware program in Windows Action Center:



If real-time protection is disabled, Action Center displays its normal warning:



### Standard-user access

If a non-administrator account is used to log on to the PC, the Disable link is not shown, meaning that real-time protection cannot be disabled. We find this ideal.

### Malware warnings

FortiClient produced very consistent warnings for all of the AMTSO tests, i.e. Eicar Drive-by-Download, PUP, Phishing and Cloud Protection, in both Desktop and Modern Modes of Internet Explorer. In all cases, the page/download is blocked, and a warning page shown in the browser:



When Fortinet’s real-time protection detected real malware on a USB flash drive, the following alert was shown:



We found FortiClient’s malware warnings to be clear, with no user decisions required, and no means of allowing a malicious program to run. We feel the consistent use of browser-based warnings for all web-based threats is simple and reassuring for the user.

### Suitability for touch

Updating the signatures, and reactivating protection if disabled, can both be done easily on a touchscreen. Scanning a flash drive is rather tricky, as the user has to tap the small arrow at the end of the Scan Now

button and select Custom Scan from the rather small menu that then appears.

### *Help and Support*

Clicking “Technical Documentation” in the Help menu opens the Support page of Fortinet’s website. Here, the product manual can be downloaded. This is very comprehensive, at 143 pages, but is easy to navigate, thanks to a clickable contents page and bookmarking. It is well illustrated with screenshots. In terms of content, it is very much oriented towards integration into a business network.

### *Summary*

Fortinet FortiClient is aimed at business users and so some aspects of the program, such as the manual, differ from those found in typical consumer programs. Nonetheless, we found the program to be easy to use on a desktop PC, with important features easily accessible and clear malware alerts that do not require user decisions.

Website: <http://www.fortinet.com>

## F-Secure Internet Security



### *Installation and interface*

Installation is very straightforward. The only options are the one-time choice of interface language, and whether to join F-Secure's malware-data sharing scheme.

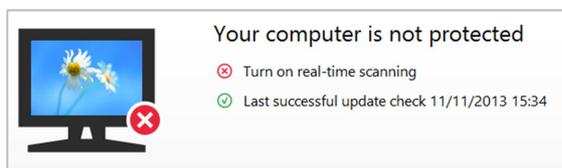
As with previous versions of the program, clicking the F-Secure icon does not open the main program window directly, but displays a launcher utility above the Windows Taskbar:



The suite's protection features are divided between two separate windows, Online Safety and Computer Security. The antivirus component is housed in Computer Security, shown in the main screenshot above.

System status is shown in the form of main text, sub-text and icon. Scan and help features are also shown on the main window, and very basic information about threats found can be seen on the Statistics tab. The program can be updated manually from the Tools tab or the F-Secure icon in the launcher utility. We do not find either of these very obvious or convenient. Subscription information can also be found by clicking the F-Secure button in the launcher, and then "View my subscriptions".

If real-time protection is disabled, the main status text and icon change to show that there is a problem; the first line of the sub-text explains the precise nature:



There is no Fix-All button or similar, or instructions as to how to reactivate the protection. The user has to re-enable the protection manually by going into Settings.

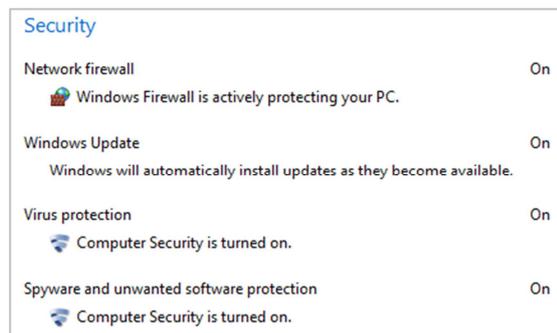
Online Safety covers website filtering and parental controls, and has its own window with a similar design to Computer Security:



Users can decide for themselves whether they like the interface spread over two separate windows plus an additional menu that are all started from the launcher app. A quick survey of AV-Comparatives' staff showed that a majority of us would much prefer to have one window, with an overall status display, launched directly from the Windows shortcut.

### Windows Action Center

F-Secure registers with Windows Action Center as an antivirus and antispyware program:



We remain surprised that that F-Secure list the product simply as "Computer Security" without the manufacturer's name.

If real-time protection is disabled, Action Center's normal alert is shown, along with an additional alarm from F-Secure:



F-Secure's own alert is persistent, and remains open until the user deliberately closes it. We feel this makes very clear that the problem remains, and needs action to solve it.

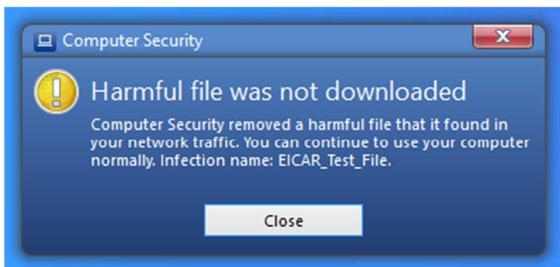
### Standard-user access

When we attempted to access Computer Security's Settings dialog, we were met with a Windows User Account Control prompt, demanding administrator credentials. Unless these are entered, the settings cannot be accessed, and so protection cannot be disabled. We find this ideal.

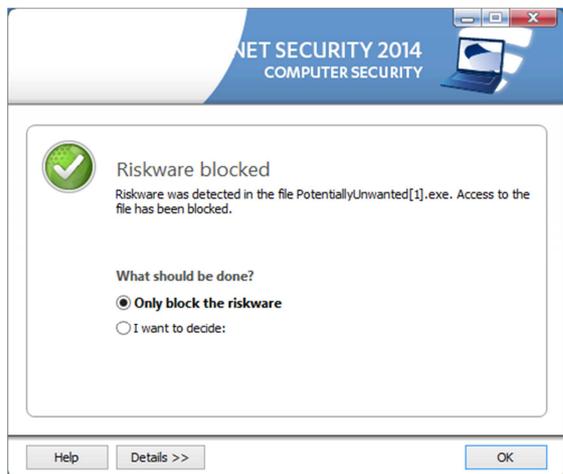
### Malware warnings

When we used Internet Explorer in Desktop Mode, the following alerts were displayed:

EICAR Drive-By-Download Test:

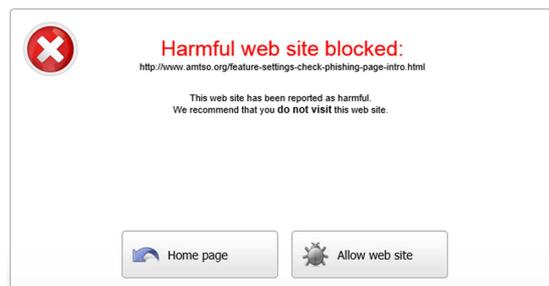


PUP test:



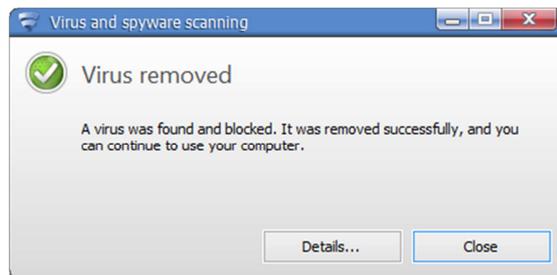
If the user chooses “I want to decide”, options to delete or quarantine the program are available. The program cannot be run, whatever choice the user makes.

With the Cloud Protection Test, there is no alert, but the download and the page are blocked. When an attempt is made to access the Phishing Test Page, the following warning page is shown:



In Internet Explorer’s Modern Mode, no alerts are shown for the EICAR drive-by-download test, or PUP Test, although the warnings can be seen if one switches to Desktop Mode. In the Cloud Protection Test, no warning is shown, but the web page is blocked. For the Phishing Test, the same warning page is displayed as in IE’s Desktop Mode.

When F-Secure’s real-time protection detected malware on a USB flash drive, the following alert was shown:



The following alert was taken from AV-Comparatives’ Real-World Protection Test, September 2013, and show a user-dependent case:

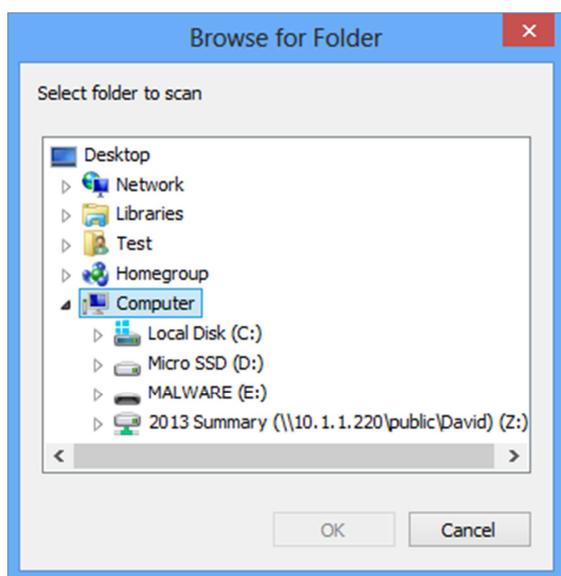


The default action, i.e. what will happen if the user presses the Enter key, is to block the program. However, we note that it is possible to allow the program to run.

Overall, we feel that F-Secure's warnings are very clear, and reassure the user that all is well.

### *Suitability for touch*

Running an update or dismissing a malware warning are both easily done with a finger, as big buttons are used. We found that reactivating protection when disabled was a little tricky; there is a small slider button which does not respond easily to being swiped with a finger. Using a custom scan to scan a flash drive is trickier still, as the selection dialog box was clearly made to be used with a mouse:



Overall, we would say touchscreen use is not bad, but could be improved.

### *Help and Support*

There is a comprehensive 66-page manual available for download from the F-Secure website. This covers installation, configuration and use of the product. There is a clickable contents page, and the document has been well bookmarked, making it easy to get to the desired section quickly. Unfortunately there are no screenshots. We were able to find answers to our standard queries on scan scheduling and exceptions, though we had to use the specific word "exclude" to find the latter.

There is also a local help service in the form of a traditional Windows Help file. This gives clear and simple instructions for basic tasks.

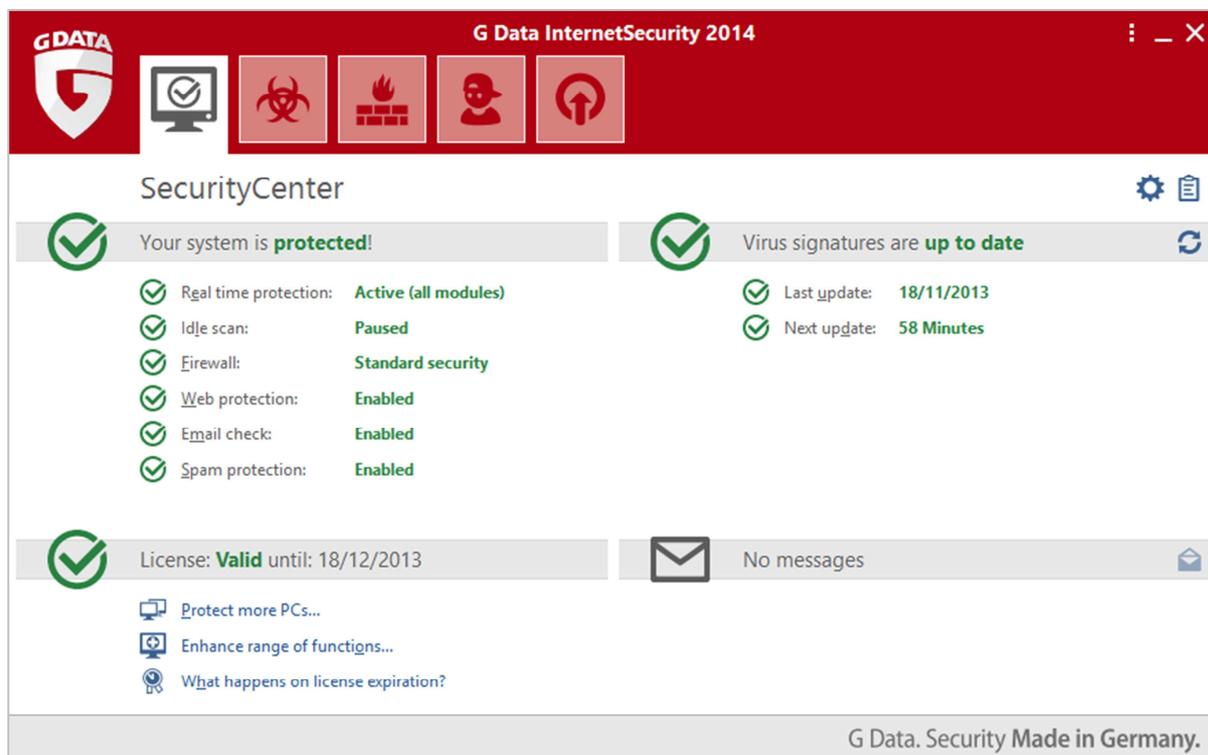
The help options are completed by a searchable online knowledge base. Overall, we found F-Secure's help functions to be very good.

### *Summary*

Although the multiple-window aspect of F-Secure Internet Security's interface is not everyone's cup of tea, we found the program largely simple and unproblematic in use. We feel its malware alerts stand out, as they are very clear and reassure the user. Help functions are good.

Website: <http://www.f-secure.com>

## G Data Internet Security



### Installation and interface

A user-defined installation is available, allowing the user to choose which components to install.

System status, subscription status and the update function are clearly displayed on the program's home page. Help is found in the menu launched from the three dots next to the window control buttons:



We did not find this very intuitive, and suggest that a standard question-mark symbol would be clearer. Logs can be seen by clicking the (more obvious) clipboard icon. It is possible to run a system scan by clicking the "Idle Scan" text/icon and "Check Computer".

More scan options are available from the scan tab (second from left) at the top of the window.

System status is shown as text and icon in the top left-hand corner of the window. If the real-time protection or firewall is disabled, this changes to show a warning; the text and symbol of the individual component(s) concerned also changes:

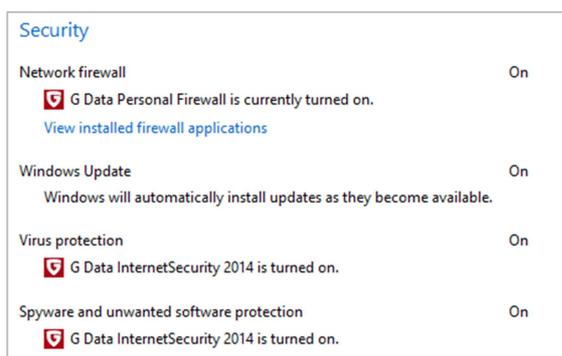


Protection is reactivated by clicking on the name or symbol for the affected component, and then clicking “Enable...” in the menu that appears. Whilst this is not exactly difficult or unintuitive, we feel that a Fix-All button that would rectify any and all problems at once would be quicker and more obvious to the user.

Whilst we found G Data’s main program window to be largely clear and effective, we feel some small improvements, such as a clearer icon for the help function, could be made.

### Windows Action Center

G Data Internet Security 2014 registers as a firewall, antivirus and antispyware program in Windows Action Center:



If the firewall or real-time protection is switched off, Action Center displays its normal warning:



### Standard-user access

When logged on to our test PC with a non-administrator account, we were unable to deactivate protection components without

entering administrator credentials at a UAC prompt. We find this ideal.

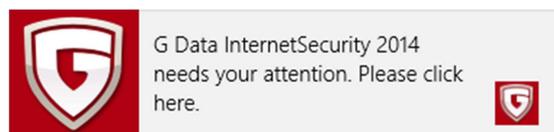
### Malware warnings

Using Internet Explorer in Desktop Mode, we saw the following alert on opening the AMTSO Drive-by-Download Test page:



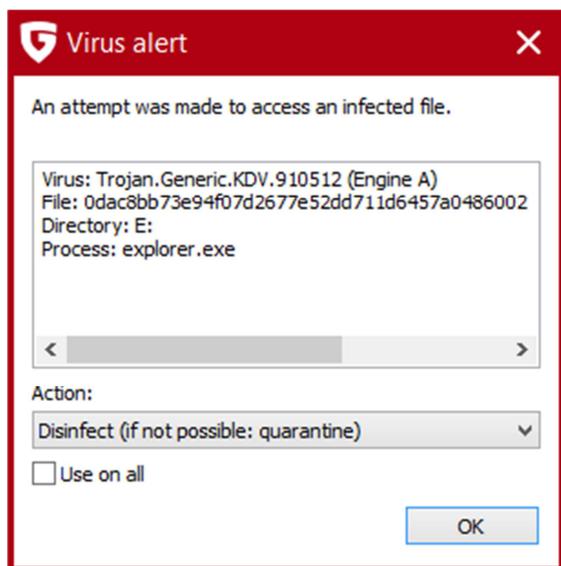
With the PUP test, a similar alert was shown, and the page blocked. The same happened with the Phishing Test page. The Cloud Protection Test is not recognised, and no alert is shown.

The following alert is shown when accessing the Drive-by-Download page in the Modern Mode of Internet Explorer:



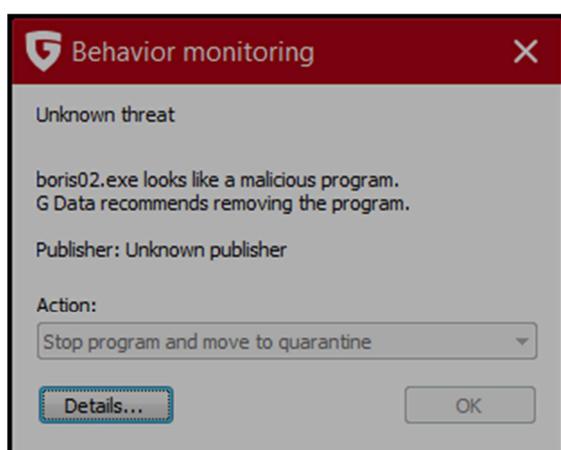
This leads to a desktop message-box stating that the threat has been blocked. A similar Modern alert is shown for the Phishing Test page, and the page itself is blocked. Attempting to download the PUP Test file also causes the page to be blocked with a G Data warning overlay.

When G Data discovered malware on a flash drive, it displayed this alert:



This gives the user a choice of actions, but the default (Disinfect/quarantine if not possible) is a safe option. We suggest that the “Use on all” option might be selected by default.

The following alert was taken from AV-Comparatives’ Real-World Protection Test, September 2013, and shows a user-dependent case:



The default action is “Stop program and move to quarantine”.

We feel G Data’s malware alerts are reasonably clear and reassuring, and where user interaction is required, the default option is safe.

### Suitability for touch

Scanning a flash drive with G Data Internet Security using a touchscreen is very simple, as the suite offers to check the drive when it is inserted:

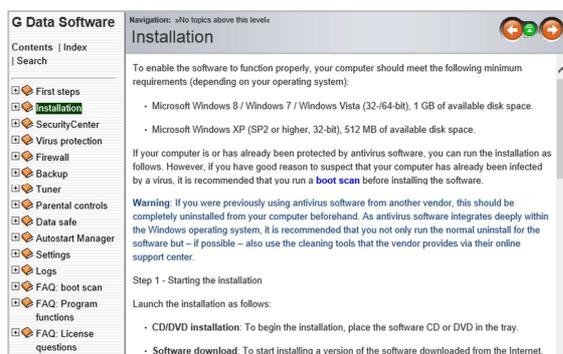


The “Check Now” button, and other relevant buttons on the scan dialog box, are very finger friendly. Dismissing the large, Modern warning message shown in Modern Mode when malware is discovered is also easily done on a touchscreen. Unfortunately, the nature of G Data’s main program window – densely packed lines of text links to execute commands – means that some commands are far from ideal for touchscreen use. Running an update and reactivating protection are both quite fiddly.

### Help and Support

Clicking the Show Help entry in the menu opens the program’s online help service. This is rather like an online manual, with a list of topics in a left-hand column; clicking on one

of these displays the contents in the right-hand pane:



The instructions are clear in themselves, and we were able to find answers to our queries on scan exclusions and scheduling a scan. However, we note that there are no instructions for finding the right

configuration page in the program, which might be a disadvantage for less-experienced users.

### Summary

We found most aspects of G Data Internet Security 2014 to be clear and appropriate, although some functions may take a little bit of experimentation to find. We also feel a Fix-All button would be a helpful addition. Malware alerts are clear, and the default option is always safe in cases where the user has to make a decision.

Website: <http://www.gdatasoftware.com>

## Kaspersky Internet Security



### Installation and interface

Installation is an extremely simple process. The only option is whether to join the Kaspersky Security Network (malware-data sharing scheme).

System status is clearly visible as text and graphic in the main panel of the program window, which also includes subscription information. There are big, obvious buttons for scan and update functions and logs (Reports) below this, and the help button can be found next to the window controls in the top right-hand corner of the window.

If the firewall or real-time protection is disabled, the text and graphic of the status display show this clearly:



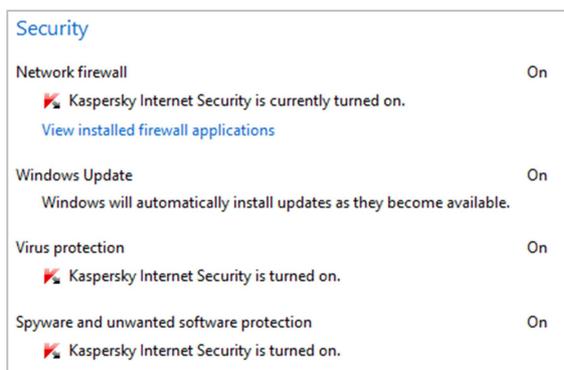
Clicking anywhere in the status display pane opens a configuration page, from which the components can be easily reactivated:



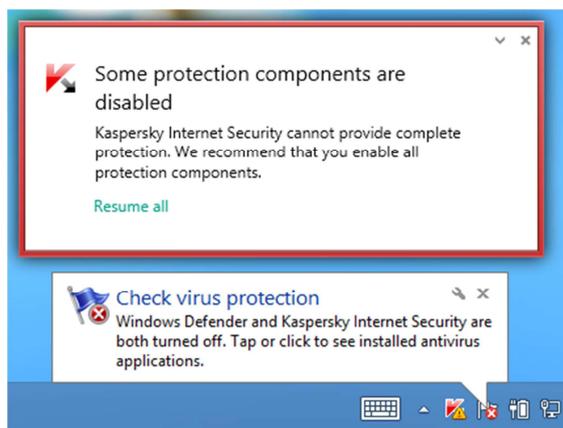
We would describe the layout of Kaspersky Internet Security’s window as excellent. All important information and functions are displayed clearly and easy to access.

### Windows Action Center

Kaspersky Internet Security registers as the firewall, antivirus and antispyware programs in Windows Action Center:



If real-time protection is disabled, Windows Action Center displays its normal warning; in addition, KIS 2014 displays its own alert:



KIS 2014’s alert has a “Resume All” link to reactivate protection; unfortunately, the message box closes after just a few seconds, meaning that the user hardly has time to respond.

If KIS 2014’s firewall is disabled, Windows Firewall is immediately activated, which we find excellent. Because of this, Action Center does not display an alert, which is as it should be.

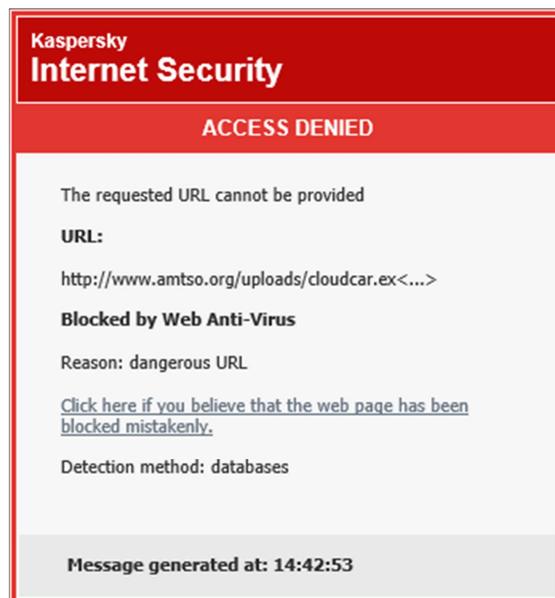
### Standard-user access

When we logged on to our test PC with a non-administrator account, we were able to deactivate real-time protection without having to enter administrator credentials. We do not find this ideal, especially in a suite obviously designed for family use.

### Malware warnings

Using Internet Explorer in Desktop Mode, we encountered the following alerts from KIS 2014:

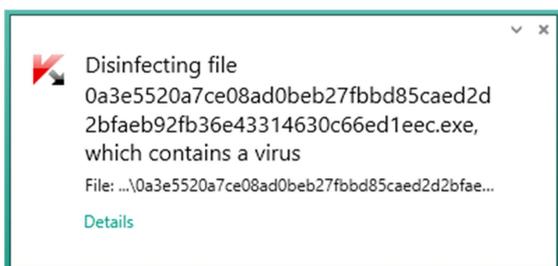
With the EICAR, Cloud Protection and Phishing tests, a warning was shown in the browser window:



The PUP Test file is not recognised with default settings; this is by design.

When using Internet Explorer in Modern Mode, we did not see any alerts when downloading the EICAR file and PUP Test file; these were blocked silently. For the Phishing and Cloud Protection tests, the same web-page alerts were shown as in Desktop Mode.

When the program’s real-time protection discovered malware on a USB flash drive, it deleted the threats automatically and displayed this alert:



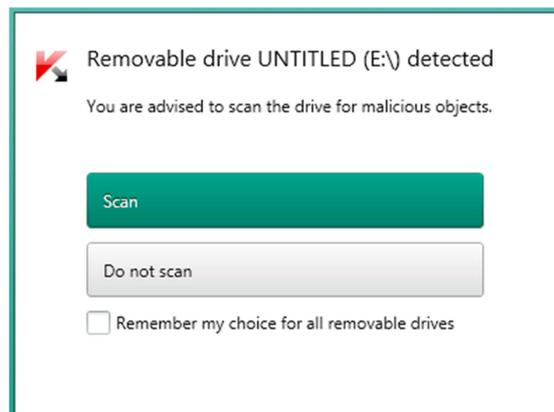
The following screenshot was taken from AV-Comparatives’ Real-World Protection Test, September 2014, and shows a user-dependent case. We note that it is possible to allow the application, although the default action (what happens if the user presses the Enter key) is to block the program.



Overall, we felt that malware warnings were clear, and largely require no user interaction.

### Suitability for touch

When a flash drive is inserted, KIS prompts to scan the drive, using a very finger-friendly dialog box:



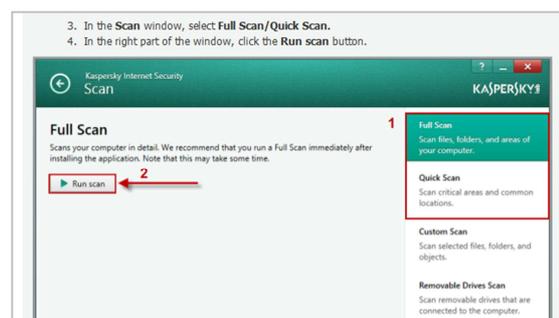
Additionally, a Removable Drives Scan can easily be run using a touchscreen, by tapping the big Scan button on the program’s home page. Updating and reactivating the protection are also easily performed with a finger, as big buttons are used throughout. Overall, we would say that KIS 2014 has been well designed for touchscreen use.

### Help and Support

A comprehensive 87-page manual is available to download from the Kaspersky Lab website. It covers all aspects of installing, configuring and using the program. It has a clickable contents page and has been well bookmarked, and is illustrated with a moderate number of screenshots. We feel that the content and style of the document seem aimed towards an experienced user or technician who is providing support for users of the product, though this is not to say that it is unsuitable for non-experts.

The local help service is in the form of a traditional Windows Help file, with topics listed in the left-hand pane and details of the selected topic shown in the right-hand pane. The content is clearly written and there are even some screenshots. We were able to find answers to our queries on scan exclusions and scheduling a scan. We note that it is aimed at providing context-sensitive help, i.e. it opens at the relevant page to the area of the program currently being used. Whilst this has clear benefits, the articles explain how to use a particular page of e.g. the settings, without informing the user how to find that page in the first place.

Finally, there is an online knowledge base, which we feel is the best of Kaspersky Lab's help features. Users can browse through a list of tasks or use the search facility to find an answer. The articles provide very clear, step-by-step instructions, very well illustrated with annotated screenshots:



We did discover one or two links in English-language pages which led to articles in Russian, though we are confident that Kaspersky Lab will rectify this quickly. Overall, we found the help facilities to be excellent.

### Summary

We found the interface of Kaspersky Internet Security 2014 to be very clear and easy to use, and well-suited to use with a touchscreen. Malware alerts are largely good, and the program warns very effectively if a component is disabled. The online help is excellent. Our one suggestion for improvement would be to prevent non-administrator accounts from disabling the protection.

Website: <http://www.kaspersky.com>

## Kingsoft Duba



### Installation and interface

The single click installation of the Kingsoft Duba 2013 is easy, even for absolute beginners. The installer does not ask any questions. The end-user license agreement is already marked as read. The only option offered is the possibility to change the installation path.



After the user clicks on “Install Immediately” the installation is carried out. After the installation, the main program window is opened at the home page.

On the home page, Kingsoft Duba displays a recommendation to carry out a cloud scan. The detailed version number can be found at the bottom of the window.

To get more information, the user has to click the AV tab.



On the AV tab, the user can see the status of the six engines. The icon of the local Avira engine is greyed out. When clicking the icon the user is told that the engine is not installed. No security message is displayed pointing out the non-activated engine.

Four of the other five engines cannot be deactivated. The KVM heuristics engine can be deactivated in the settings. When this feature is turned off, the AV tab still shows all non Avira-engines to be active.

When any options on the “Defensive Armor” tab are switched off, a clearly visible message is displayed and the colour of the Kingsoft Duba icon in the system tray also changes from blue to orange.

The log is easily accessible from the upper menu bar.

### Windows Action Center

In the security section of the Windows Action Center (WAC) Kingsoft Duba registers correctly in the antivirus and antispyware sections. When the real-time protection is disabled, the status is reflected correctly in the WAC.

### Standard-user access

Using a non-administrator account, the real-time protection can be disabled without any difficulty, which we do not find ideal.

### Malware warnings

The AMTSO Eicar Drive-by-Download Test causes Kingsoft Duba to display the following alert:



No alert is shown for the PUP test.

The AMTSO cloud test file is regarded as safe file:



The AMTSO phishing test is not recognised. When a flash drive with the Eicar test file is inserted, Kingsoft Duba declares the drive to be safe:



However, when a context-menu scan is done on the same drive, the Eicar file is correctly detected:



The following screenshot comes from AV-Comparatives' Real-World Protection Test, September 2013, and shows a user-dependent case:



1: System Protection

This file format is suspicious, it is not recommended to run it

2: This file is disguised. It is a program with a fake file extension. Trojans often use such a disguise to trick users into running them. It is recommended not to open the file.

3: Suspicious file name

4: Real file extension: .exe

5: Stop the suspicious program, in order to prevent the system being compromised

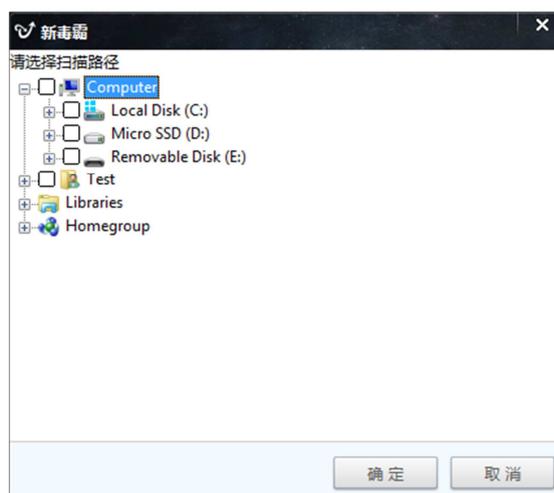
6: More actions

*Firewall Settings*

Kingsoft Duba 2013 uses Windows Firewall, so this section does not apply.

*Suitability for touch*

Updating Kingsoft Duba on a touchscreen is very easy, as it is done with a big, finger-friendly button. Reactivating protection is also easily done, as again big buttons are involved. A malware alert can be dismissed by tapping the X in the top right-hand corner of the dialog – this is not very big, but is well spaced. Alternatively, the same dialog provides a big, easy-to-tap Scan button. Only scanning a flash drive turned out to be tricky. There is an option to scan USB devices, but this did not work in our test. The custom scan option functioned correctly, but uses a drive-selection dialog that was obviously designed for use with a mouse:



### *Help and Support*

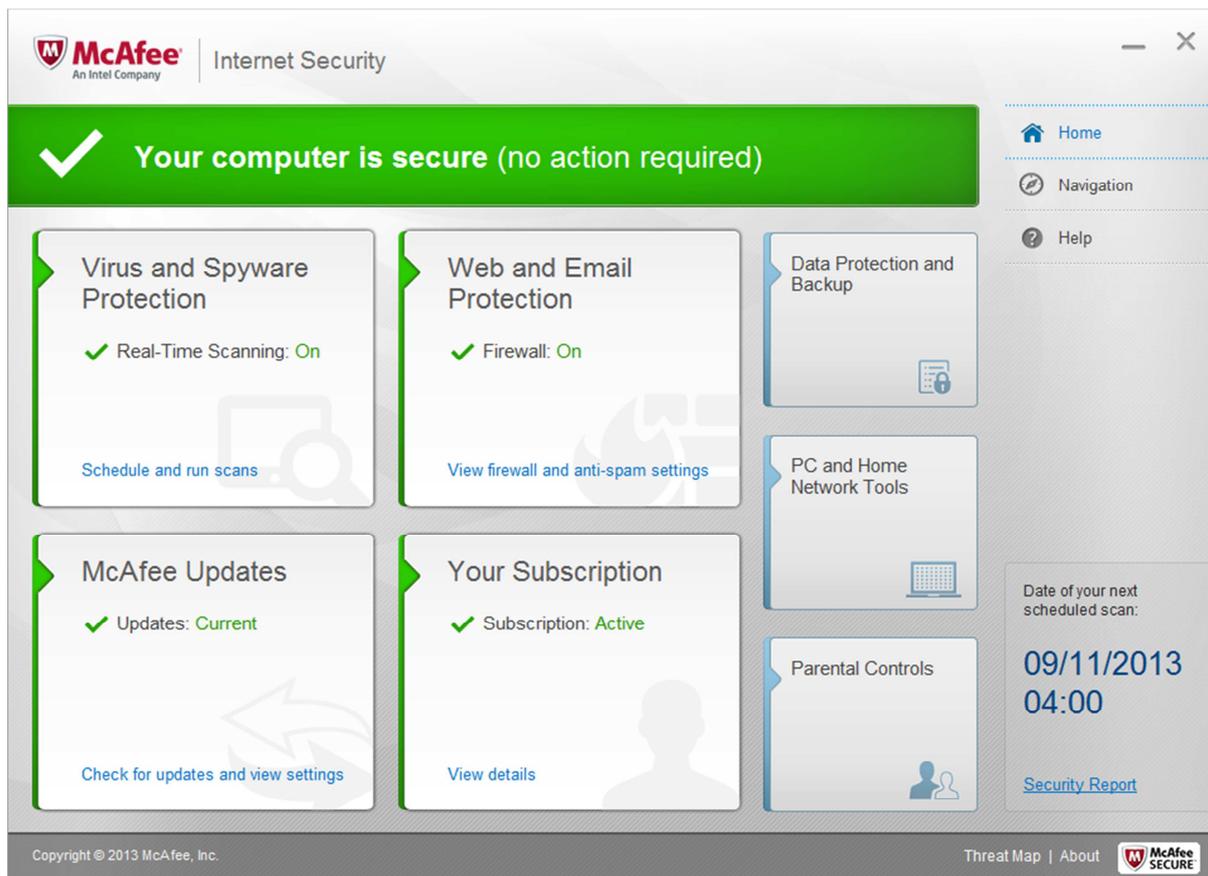
No local manual is provided. In the upper menu bar of the program the user finds the options Duba Weibo Service and Feedback. When clicking the first option, the user is directed to a website with a list of Kingsoft support staff that can be approached via the Sina or Tencent Weibo service. Weibo is the Chinese Twitter equivalent. A Weibo information service may be in line with the current Zeitgeist, but we still believe that program settings and options should at least be explained in more detail online.

### *Summary*

The Kingsoft Duba 2013 is a freeware product with the simplest installation we have encountered. When any option on the "Defensive Armour" tab is changed, a clearly visible message is displayed and the program icon in the system tray changes its colour. We believe that all included engines in a product should be activated. When engines are not installed or deactivated, the program should at least also display a clearly visible message on the program window and the tray icon.

Website: <http://www.ijinshan.com>

## McAfee Internet Security



### Installation and interface

The user's McAfee account details have to be entered before installation can proceed. A custom installation option is available, which allows the user to select the components to be installed.

System status, subscription status, scan, update and help features are all directly accessible from the home page of the program. Logs can be accessed by clicking Security Report in the bottom right-hand corner, then Total Activity.

If the firewall component is deactivated, the status display text and icon change, and the whole strip turns red. Additionally, an overlay covers the lower part of the window, with a very obvious "Turn On" button:



We feel this warns very clearly, and makes it very easy for the user to rectify the problem. However, when we switched off real-time protection, when we switched off real-time protection, red stripe with the warning appeared, but not the overlay with the Turn

On button. The user would have to manually reactivate the protection in this case.

With this one exception, we found the program interface of McAfee Internet Security 2014 to be clear and easy to use.

### Windows Action Center

The suite registers with Windows Action Center as a firewall, antivirus and antispyware program:

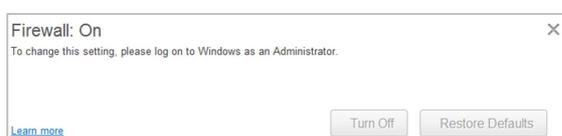


If the firewall or real-time protection is disabled, there is only a muted warning from Windows Action Center: the tray icon does not change, and the non-urgent alert (“New messages are available”) is shown some time later. The McAfee tray icon changes to show an alert, although Windows hides this icon by default.



### Standard-user access

When we logged on to our test PC with a non-administrator account, we found that the controls for disabling firewall and real-time protection were greyed out:

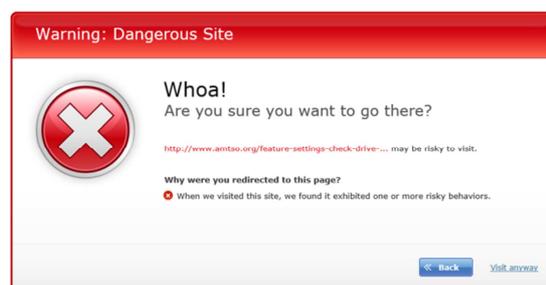


This prevents standard user accounts from disabling protection, which is as it should be.

### Malware warnings

Using Internet Explorer in Desktop Mode, the following alerts were displayed:

EICAR test file drive-by-download:



AMTSO Potentially Unwanted Program Test file:



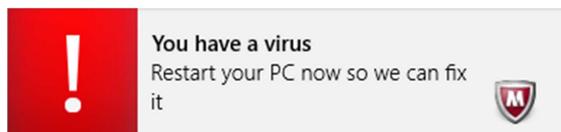
AMTSO Cloud Protection:



AMTSO Phishing Test Page: the same alert was shown as for the EICAR test file.

Using Internet Explorer In Modern mode, these alerts were shown:

EICAR drive-by-download test:



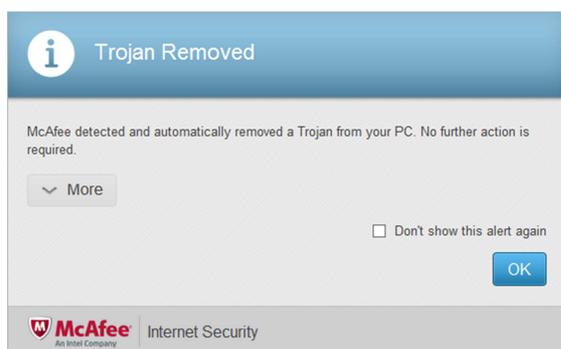
Tapping this alert opens the following restart dialog:



The initial alert for the EICAR test file was also shown for the Potentially Unwanted Program Test and the Cloud Protection Test.

The Phishing Test Page was not recognised in Modern mode; the page was displayed.

When malware was detected on a USB flash drive by McAfee's real-time protection, the following alert was displayed:

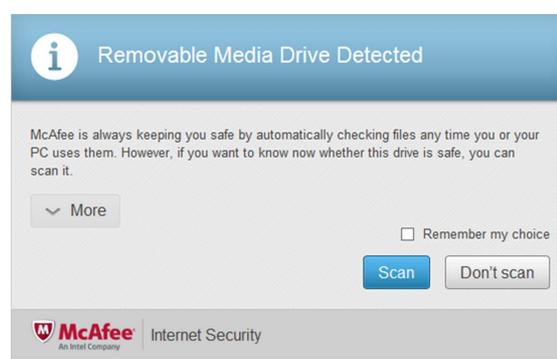


We would describe McAfee's malware alerts as very clear. However, we note that two of them make it easy for the user to bypass the

warning and download the file anyway, which does not seem ideal to us.

### *Suitability for touch*

Updating signatures, dismissing a malware alert in Modern mode, and reactivating a disabled protection component are all very finger-friendly tasks with McAfee Internet Security; big buttons or widely spaced text links are used throughout. When a USB flash drive is connected to the PC, McAfee displays the following dialog box:



The drive can be scanned very easily by tapping the Scan button; viewing results and returning to the program's home page use similar big, finger-friendly buttons. Overall, we would say that the suite has been well designed for touchscreen use.

### *Help and Support*

The program has its own Help window, accessible from the Help button on the home page. This looks much like a Windows Help file, with a list of topics on the left, details displayed on the right, although the content is actually online. A range of topics relating to configuration and use of the product are covered, and there is a search feature. We found clear, simple answers to our two standard queries, and we note that the articles explain how to find the relevant page/dialog box.

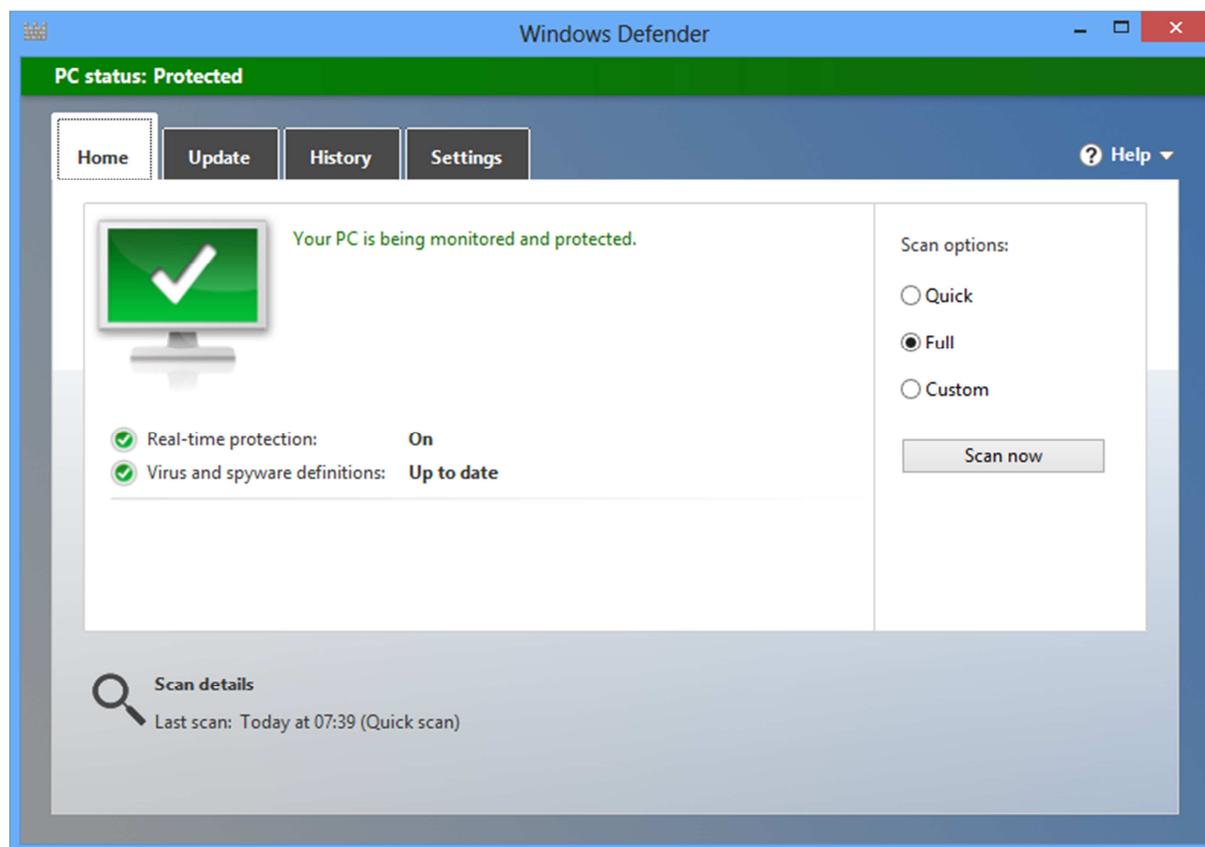
There is also an FAQ page in the Technical Support section of McAfee's website. This lists 10 FAQs, mostly relating to removing existing antivirus and installing McAfee. There is a search function, although we did not find this helpful. Our search for directions on scheduling a scan produced answers applicable to older versions of the product, while the search for setting scan exclusions produced 150 results, with none of those displayed on the first page being at all relevant. We would suggest that users are much better served by the program's own help window.

### *Summary*

By and large, we found McAfee Internet Security 2014 to be clear and user-friendly. It is well suited to use with a touchscreen. Malware alerts are clear, albeit some have options to let the program run.

Website: <http://www.mcafee.com>

## Microsoft Windows Defender for Windows 8



### *Installation and interface*

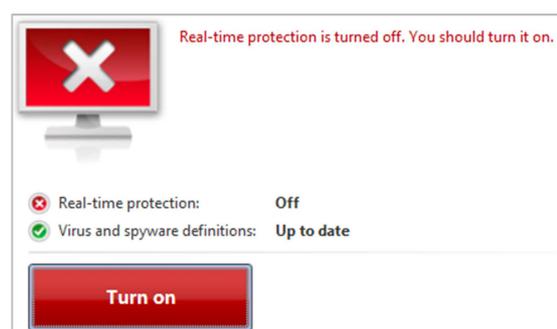
Windows Defender is included by default in Windows 8, so no installation is necessary.

We would like to point out to readers that Windows Defender in Windows 8 is a complete antimalware solution (antivirus and antispyware), comparable to Microsoft Security Essentials which is available as an add-on for earlier Windows versions.

The main program window displays the system status in the form of text and a computer screen icon. The Home page of the program also includes Quick, Full and Custom scan options, and shows the date of the last scan. There is a help menu in the top right-hand corner. The Update and History tabs at the

top of the window can be used to access the update feature and logs, respectively. As the program is free, subscription information is not applicable.

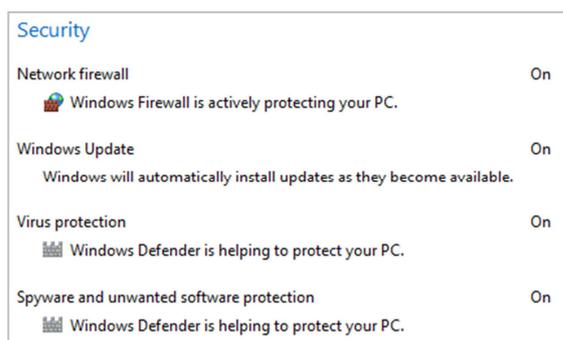
If real-time protection is disabled, the status display changes text and icon appropriately, and provides a very prominent “Turn On” button to rectify this:



In our opinion, all essential functions of Windows Defender are easily accessible, and important information is very clearly displayed.

### *Windows Action Center*

Windows Defender is shown as the antivirus and antispyware application in Action Center:



As is to be expected with a product integrated into the operating system, Action Center shows its full warning when Windows Defender is deactivated:



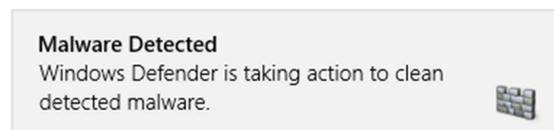
### *Standard-user access*

When we attempted to disable the real-time protection using a standard user account, Windows User Account Control prompted us to enter administrator credentials. Without these, the protection cannot be disabled, which we find ideal.

### *Malware warnings*

Windows Defender does not recognise the potentially unwanted program/phishing/cloud features of the AMTSO Feature Settings Test. It does however detect the EICAR test file as malicious. When we attempted to download

this, in both Desktop and Modern modes, the program displayed a Windows-8-style warning message in the top right-hand corner of the screen:

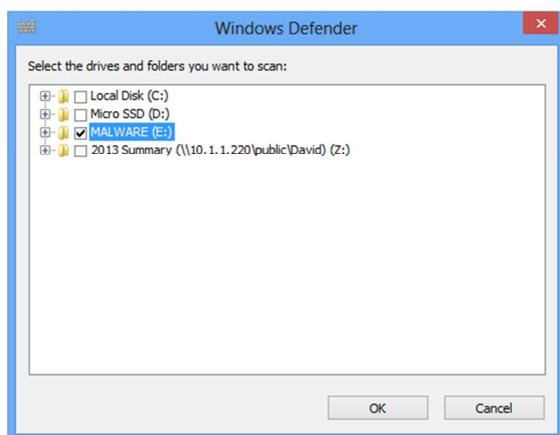


The same message is displayed when the real-time protection detects malware on a flash drive. Detected items are quarantined.

We find Windows Defender's malware alerts to be very good. Either the malware is quarantined automatically, or there is a simple default action for non-expert users which will protect the PC. Advanced users can either recover items from quarantine, or see details of the threat and choose a non-default action if they want to.

### *Suitability for touch*

We had no difficulty at all in performing most essential tasks using a touchscreen. Running quick or full scans, updating and reactivating protection all use big buttons/tabs or widely spaced text links. Dismissing the malware warning that appears in both Desktop and Modern modes is also a very finger-friendly task. Scanning a flash drive is a little more tricky, as the dialog box concerned was definitely designed for the precision of a mouse:



### *Help and Support*

We found the local help feature, accessible from the Help button in the program window, provided very little in the way of instructions on how to use the program. Searching Microsoft's website for help with Windows Defender produced a promising-looking article, but this turned out to be relevant to the Windows 7 version only. We suspect that many users may be confused by the fact that Windows Defender in Windows 7 is different

in functionality and interface from Windows Defender in Windows 8, whereas Microsoft Security Essentials for Windows 7 is very similar in functionality and interface to Windows Defender in Windows 8. To conclude, we would have to describe the help available for Windows Defender in Windows 8 as puzzling.

### *Summary*

We found Windows Defender for Windows 8 to be very simple and straightforward to use, with both touchscreen and mouse/keyboard. All important features are easily accessible and malware notifications are excellent for both expert and non-expert users. As the program is so easy to use, most users will not need much assistance; however, we feel the help features could nonetheless be improved.

Website: <http://www.microsoft.com>

## Panda Cloud Antivirus Free



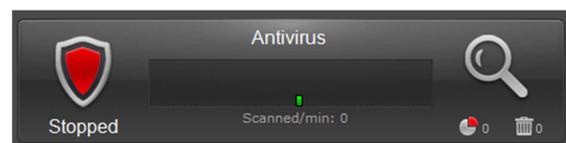
### Installation and interface

Installation is very simple, but provides one page of options, including interface language, and whether to use Panda’s recommended toolbar/search service/homepage:



System status is displayed as an icon and text on the home page of the program. Scan options and logs are available by clicking or tapping the magnifying glass symbol, and the help function can be found by clicking the cog-wheel icon. Subscription status and an update function are not needed, as the program is free and cloud-based.

If the program’s real-time protection is disabled, the text and icon change to show this:



Clicking or tapping the status display area opens the antivirus configuration page, where an Enable button allows the problem to be rectified:



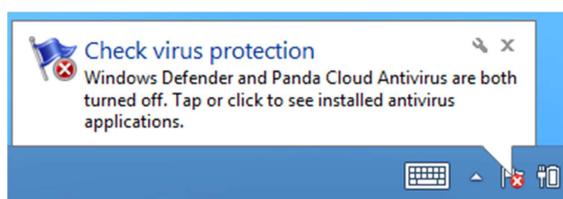
We found Panda’s program interface to be very easy to use one we had got used to it, but that its sparse use of text meant that a little exploring was necessary at first.

### Windows Action Center

Panda Cloud Antivirus Free Edition registers with Action Center as an antivirus and antispyware program:



Action Center’s normal warning is displayed if the real-time protection is disabled.

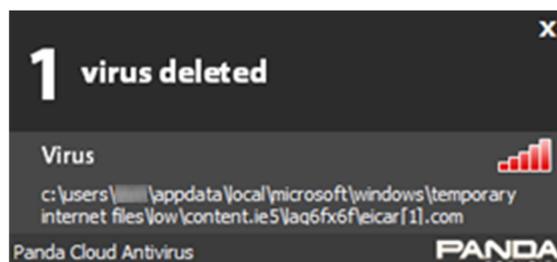


### Standard-user access

A user with a non-administrator account can disable the real-time protection without having to enter administrator credentials. We do not feel this is ideal, especially if the program is used to protect a family computer. However, Panda inform us that the settings can be password-protected.

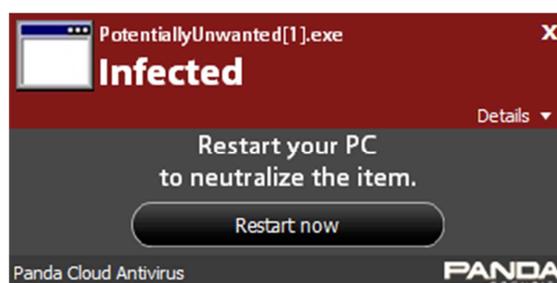
### Malware warnings

When we opened the EICAR Drive-by-Download Test page, Panda deleted the file and displayed the following warning:



We feel this makes reasonably clear that no further action is needed.

The alert below was shown when we tried to download the PUP Test file:



This makes very clear that the PC should be restarted and provides a button do this easily.

We were able to download the CLOUDCAR Cloud Protection Test file without any action being taken by Panda. However, when we attempted to open it, the real-time protection deleted it.

The following alert was shown when we attempted to view the Phishing Test page:



We note the alert claims that the page “contains malware or exploits”, which is not actually correct. When we switched to Internet Explorer’s Modern Mode and opened the EICAR Drive-by-Download test page, the file appeared to have downloaded without Panda having taken any action. In reality, the file had been stripped of its content and left as a 0 KB file in the Downloads folder. When we returned to Desktop Mode, we found the following alert had been displayed:



Clicking “Step-by-step guide” opened a web page, which suggests that the user may need to contact technical support in order to solve the problem. Panda tell us that this is a mistake, which will be rectified in the next version of the program.

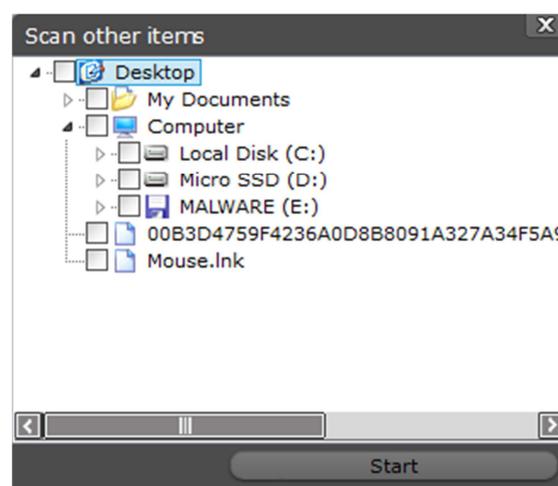
Downloading the PUP and Cloud Protection Test files in Modern Mode produced exactly the same reaction from Panda as the EICAR Test file. The Phishing Test page was not recognised in Modern Mode.

When Panda’s real-time protection detected malware on a USB flash drive, it deleted the threats and displayed an alert like the one for the EICAR test file, stating that the malware had been deleted.

We found Panda’s malware warnings in Desktop Mode to be clear and appropriate. However, it would appear that Panda have not considered the warnings produced when using Internet Explorer in Modern Mode. The Phishing Test page is not blocked, and all three AMTSO test files produce a warning in Desktop Mode suggesting that a threat cannot be removed and that telephone assistance is necessary. This is despite the fact that all three files have actually been neutralised already.

### *Suitability for touch*

An update function is not necessary, given the program’s cloud-based nature. Scanning a flash drive involves negotiating a very finger-unfriendly dialog box:



Dismissing malware warnings with a finger is not applicable, as none are shown in Modern Mode. If real-time protection has been disabled, it can be reactivated easily with two taps of the finger on big buttons.

### *Help and Support*

The help feature for Panda Cloud Antivirus Free can be found in the menu displayed when the cog-wheel icon is clicked. It is web-based, and features a list of topics in a left-

hand panel; clicking one of these displays the details in the right-hand panel.



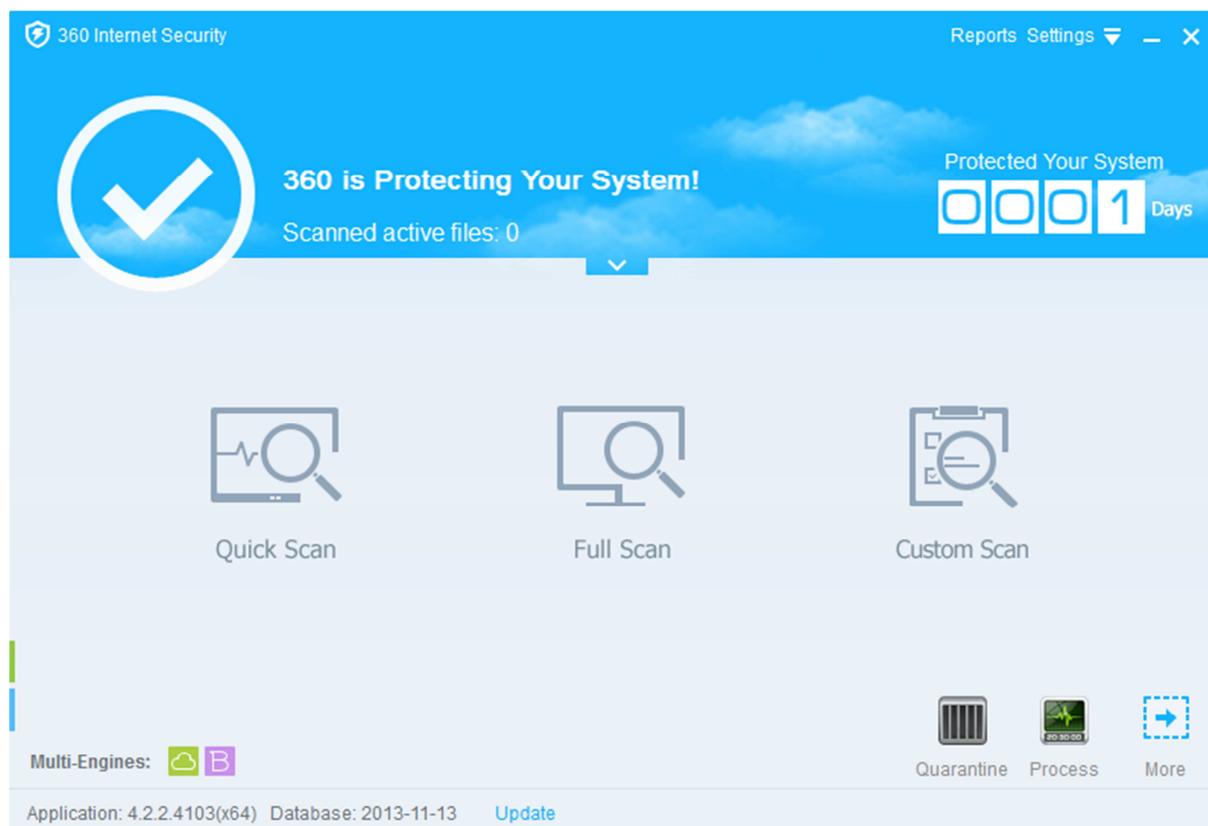
We found the instructions to be simple and clear. Aside from pictures of icons, there are no screenshots, however. Our search for scan exclusions very quickly found a suitable answer; there is no facility for scheduling scans in the program, so our second search item was not applicable. We feel the help function is more than adequate for a simple free program.

## Summary

We found Panda Cloud Antivirus Free to be very simple to use with a little practice. The help facility is quite sufficient, and malware alerts in Desktop Mode are clear and appropriate. Unfortunately, no alerts are shown in Modern Mode, but confusing messages then appear on the desktop. We also feel non-administrators should not be able to disable the protection.

Website: <http://www.cloudantivirus.com>

## Qihoo 360 Internet Security



### *Installation and interface*

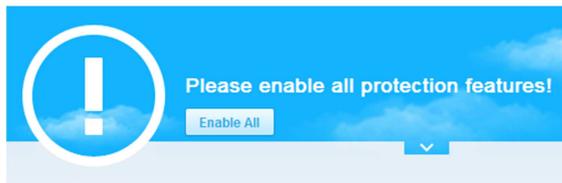
Please note that the Chinese-language version of the program is used in our tests. We have reviewed the English-language version here for the benefit of English-speaking readers.

Installation is extremely quick, taking less than a minute. There is a custom installation option, but this only allows the installation folder to be changed, there are no other options.

We note that if the user clicks on 360's item in the Windows Programs and Features list, and then Change/Uninstall, the program is immediately uninstalled without any options or even the customary "Are you sure?" prompt.

The main program window features a very clear status display, and big buttons for the scan options: Quick, Full and Custom. There is a (rather small) update link at the bottom of the window, and a mini menu-bar at the top has links to Reports (logs) and the help features; the latter menu is symbolised by a down-arrow icon, which we did not find at all intuitive. As the program is free, subscription information is not applicable.

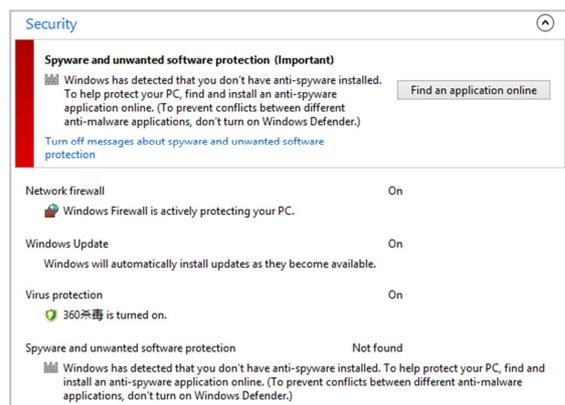
When real-time protection is disabled, the text and icon of the status display change to show this, and an "Enable All" button appears, which will rectify the problem:



Overall, we found the program interface to be clear and simple; all important functions can be accessed directly from the program’s home page, although we would suggest that the “?” symbol commonly used to indicate the help function would be clearer than the current symbol.

### Windows Action Center

Qihoo 360 Internet Security registers with Windows Action Center as an antivirus program, but not as antispyware:



It is rather difficult to assess how Windows Action Center reacts when real-time protection is disabled, as it permanently displays a warning about spyware protection.

Qihoo inform us that they make a separate antispyware product call “360 Safeguard”, also available free.

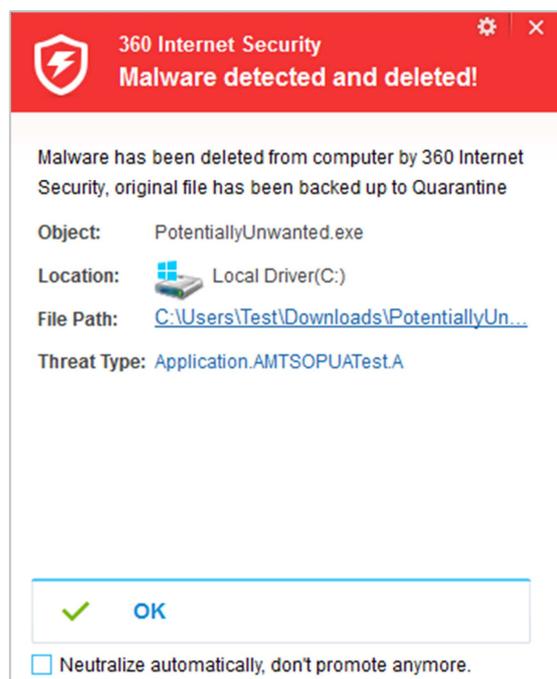
### Standard-user access

When we logged on to our test PC with a non-administrator account, we were unable to even start the program without entering administrator credentials. It is thus

impossible for standard users to disable the protection.

### Malware warnings

In Internet Explorer’s Desktop Mode, the following alert is shown when the AMTSO PUP test file is downloaded:

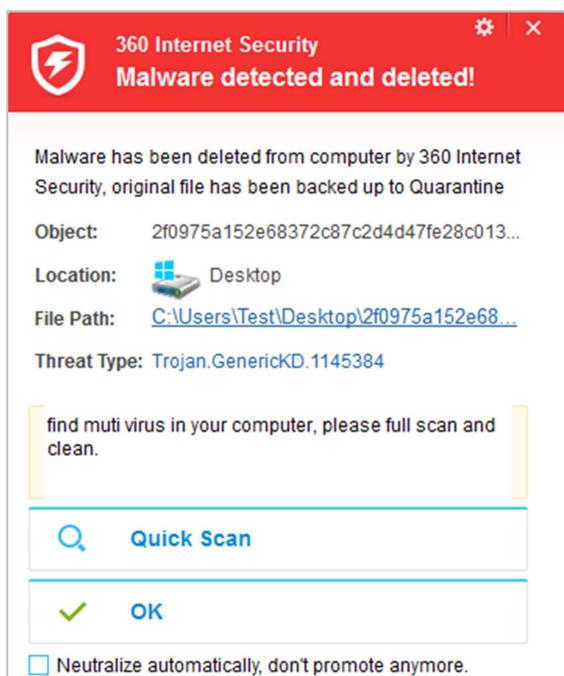


A similar alert is shown for the EICAR test file. Neither the Cloud Protection Test nor the Phishing Test is recognised, so no alerts are shown for these.

When using Internet Explorer in Modern Mode, we did not see any alert when visiting the EICAR drive-by-download page, but attempting to download the PUP test file produced the following alert:



The alert shown when real-time protection discovers malware on a flash drive is very similar to that for the EICAR test file:



The following screenshot comes from AV-Comparatives' Real-World Protection Test, September 2013, and shows a user-dependent case:

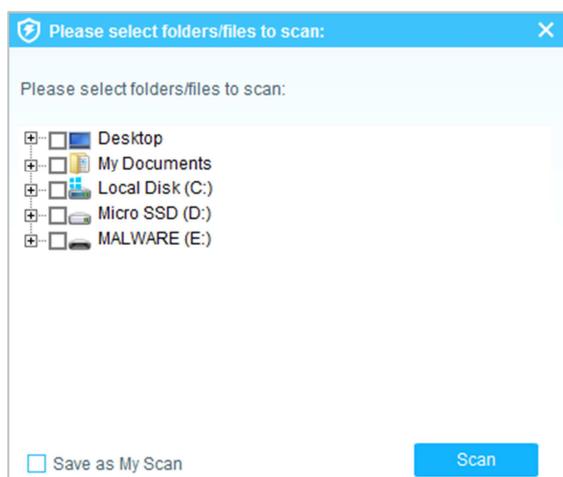


The title reads “The file you are downloading is a disguised dangerous program, it is recommended that you delete it immediately”. The sub-text with the file name states that the file “might be a disguised dangerous program... in order to trick users, this program is disguised as a picture, video or document”. We find the succinct description of a Trojan to be excellent. The two options are “Delete” and “Close”. Qihoo inform us that if the user presses the Enter key, nothing will happen. If the user clicks “Close”, the file will be left where it is but not executed.

### Suitability for touch

Updating Qihoo 360 using a touchscreen is very straightforward.

Reactivating real-time protection is also easy, thanks to the finger-friendly “Enable All” button on the home page. Malware alerts too have big buttons suitable for touchscreen use. Scanning a flash drive is not so easy, as the drive has to be selected from a list designed for mouse use:



## Summary

We found Qihoo 360 Internet Security to be largely very easy to use, with a simple program interface and clear malware alerts.

Website: <http://www.360.cn>

## Help and Support

As far as we are able to determine, there is no English-language help for the product. Both links in the Help menu lead to Chinese-language pages on the manufacturer's website. Although the home page of the website has a link entitled "English version", this only leads to a single page in English with a company overview.

## Sophos Endpoint Security and Control



### Note about the program

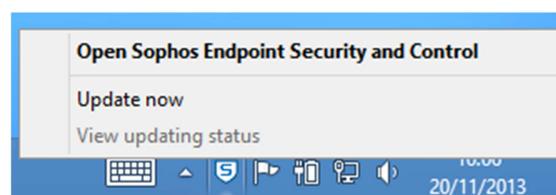
Sophos Endpoint Security and Control is an endpoint protection package intended for business use. Consequently, functionality and user interface may differ from the consumer-oriented suites in this review. Some features, such as status monitoring, would be controlled centrally in a business network, and do not necessarily need to appear in the client software.

### Installation and interface

Installation is straightforward, with minimal options.

There is no overall system status display. The Status box in the top left-hand corner of the window indicates whether real-time protection is enabled or not. Buttons for full and custom scans can be found on the home

page, along with links to various different logs. There is also a help button on the toolbar at the top of the window. Signatures can be updated by right-clicking the program's System Tray icon:



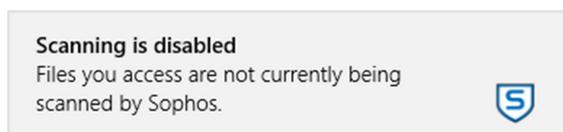
Subscription information is not displayed.

### Windows Action Center

Sophos registers with Windows Action Center as an antivirus and antispyware program:



If real-time protection is disabled, Sophos displays a Windows 8 Modern-Style alert in place of Action Center’s usual “bubble”:



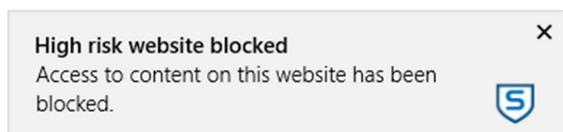
### Standard-user access

When a user logs on to the computer with a non-administrator account, Sophos deactivates all protection configuration controls in the interface, so that protection cannot be disabled. We find this ideal for both home and business environments.

### Malware warnings

The following alerts were shown for the AMTSSO Feature Settings Test in Desktop Mode:

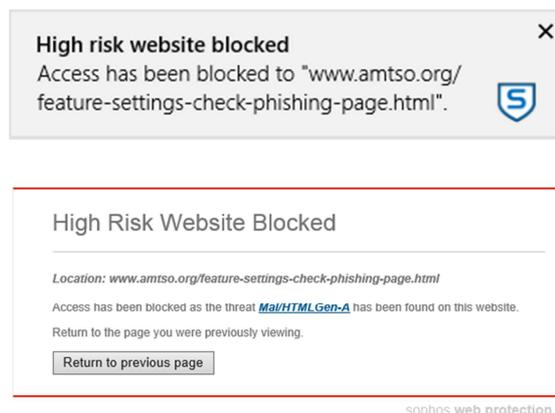
EICAR Drive-by-Download Test and Cloud Protection Test:



PUP Test:



Phishing Test:

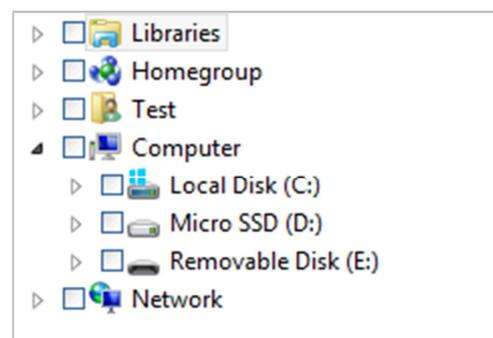


The Phishing Test page is not recognised when Internet Explorer’s Modern Mode is used. For the other tests in Modern Mode, and when malware was detected on a flash drive, the same warning was shown as for the PUP Test (“A threat has been blocked and quarantined”).

We found all Sophos’ alerts made clear to the user that the threat has been blocked. We feel the use of the Windows 8 Modern-Style alert in both Desktop and Modern Modes is very good, as it provides the user with a consistent reaction.

### Suitability for touch

Whilst we were able to update the signatures using a finger, this task was definitely not designed for touchscreen use. The same applies to scanning a flash drive:



Reactivating protection was a little easier, as the relevant links are more widely spaced. As noted above, malware warnings all use Windows 8's modern format, which is as finger-friendly as can be.

### *Help and Support*

Clicking the Help button on the program's toolbar opens a traditional Windows Help file, with various topics listed in the left-hand pane, details of the selected topic being shown in the right-hand pane. There is a search function, with which we easily found answers to our queries on scheduling a scan and scan exclusions. We found the articles to be clear and succinct, with details of how to find the relevant configuration page in each case. There is also a comprehensive 123-page manual available from the Sophos website, which covers all aspects of installing, configuring and using the product. It has

been produced to a very high standard. Not surprisingly, it is very much oriented towards system administrators using the product in a business network. Overall, we found Sophos' help functions to be very good for business use.

### *Summary*

Bearing in mind that it is designed for business use, we found Sophos Endpoint Security and Control to be well thought-out. We particularly liked its consistent use of simple and clear Windows-8-style malware alerts in both Desktop and Modern Modes. Help functions are very appropriate for its intended use.

Website: <http://www.sophos.com>

## Tencent QQ PC Manager



### Installation and interface

The installation of the Tencent PC Manager is easy, even for absolute beginners. The installer does not ask any questions. The end user license agreement is already marked as read. The only option offered is to change the installation path.



After the user clicks on “Install Immediately” the installation is carried out. Clicking “Start experiencing” finishes the installation and opens the home tab. On the home tab, PC Manager indicates that the real-time protection and the connection to the PC Manager Cloud Security Center are enabled. A green icon invites the user to carry out a health check of the PC. In the following health check, the computer scored only 13 health points.

After the installation is completed, Tencent might better display a message urging a user to carry out a health check. The standard green icon might be mistaken as a safety message.

On the AV tab, the status of the engines and the real-time protection modules is clearly visible.

The Avira engine icon displays a question mark after installation with the message that no local virus definitions exist. The user has to download around 100 MB of virus definitions.

Two of the engines and all real-time protection modules can easily be disabled or enabled. A deactivated engine is greyed out. When a real-time protection module is deactivated, a clearly visible message is displayed on the program window and the program icon in the system tray.

A log is available after each scan.

### *Windows Action Center*

In the security section of the Windows Action Center (WAC) Tencent PC Manager registers correctly in the antivirus and antispyware sections. When the real-time protection is disabled, the status is reflected correctly in the WAC.

### *Standard-user access*

Using a non-administrator account, the user is asked to input the admin password as soon as the first click on the Tencent icon is made.

### *Malware warnings*

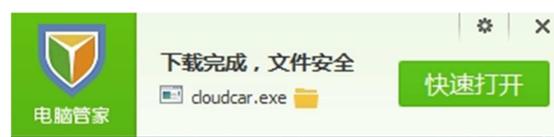
The AMTSO Eicar test causes the following alert to be shown:



A similar alert is shown for the AMTSO PUP Test:



The AMTSO cloud test file is regarded as safe file:



The AMTSO phishing test is not recognised.

When a flash drive with the EICAR test file is inserted, Tencent PC Manager scans the drive but does not report anything.



When a context scan is done on the same drive, the EICAR file is correctly detected.

The following screenshot is taken from AV-Comparatives' Real-World Protection Test, September 2013, and shows a user-dependent case:



1: The following program is trying to change startup settings, it is recommended to stop it

2: Program Name: scvh.exe

3: A suspicious program is trying to change startup settings. Trojans often do this, to ensure that they run every time the computer is switched on.

4: Block (recommended)

5: Allow

6: Do not ask again for high-risk actions of this program, block automatically

7: OK

### Firewall Settings

Tencent QQ PC Manager uses Windows Firewall, so this section does not apply.

### Suitability for touch

Updating the product and reactivating protection are both easily done using big, finger-friendly buttons. When a flash drive is inserted, Tencent displays a dialog box, but tapping this merely opens the drive in Windows Explorer. Scanning the flash drive manually is tricky, as the drive has to be selected using a dialog that was designed for use with a mouse:



### Help and Support

The program help is accessible by clicking an icon in the upper right menu bar. The user is directed to the Tencent Manager online help that provides information even understandable for users with little technical knowledge. No local manual is provided.

### Summary

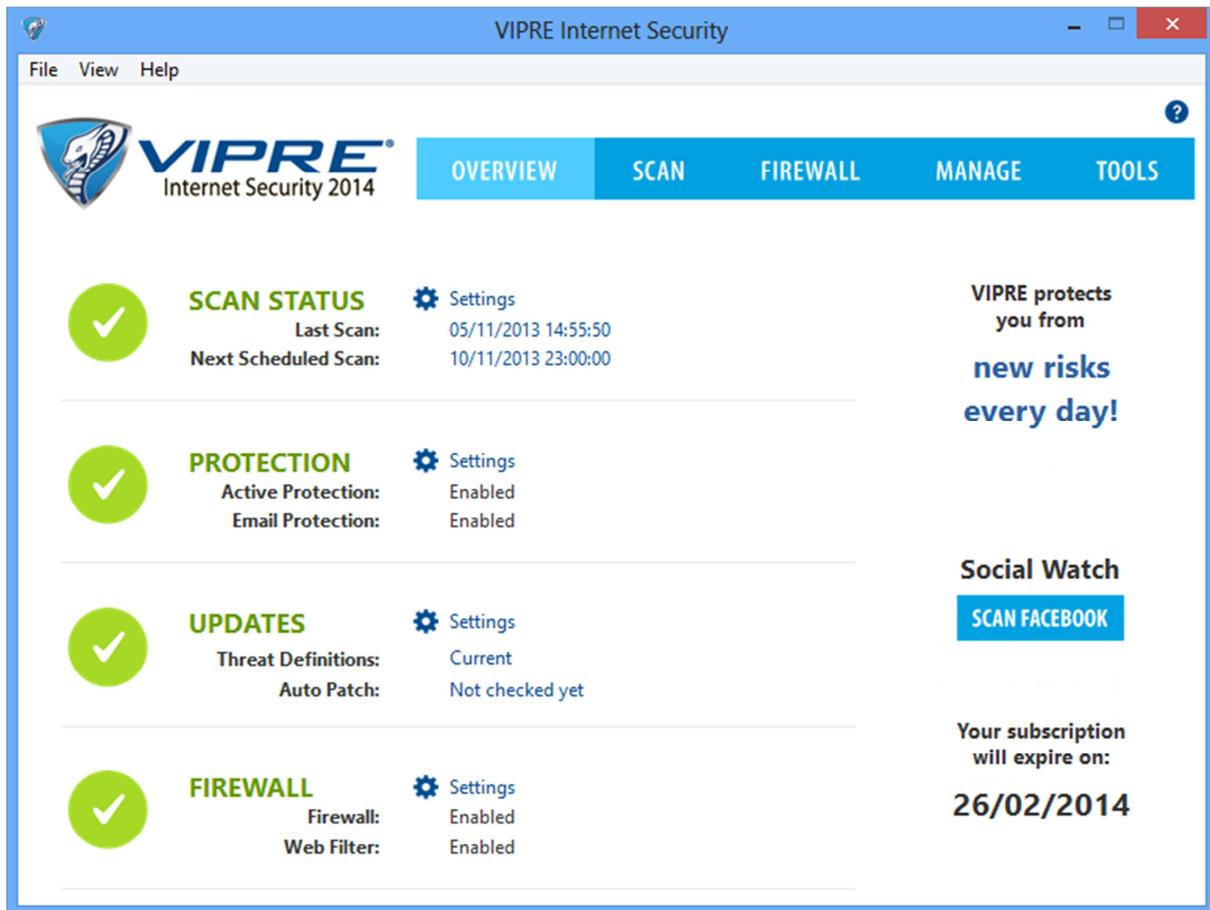
The Tencent QQ PC Manager is an impressive freeware product. We were impressed by the integrated software management function that reminds and helps users to keep other installed software such as Java up-to-date.

Nevertheless, all integrated engines should be enabled by default. When real-time protection modules are deactivated, the program displays a clearly visible security message on the program GUI and the program icon in the system tray.

After installation, the Avira engine should already have a first set of local virus definitions.

Website: <http://guanjia.qq.com>

## ThreatTrack VIPRE Internet Security



### Installation and interface

Installation is extremely simple; the user can change the installation folder location, and opt out of the malware data sharing scheme. Otherwise, just a couple of clicks are needed to complete the setup wizard. When the program has been installed, a dialog box appears, asking whether the current network should be trusted:



The home page of the program window shows the status of individual components, scan and update functions, and the subscription expiration date. There is a Help button in the top right-hand corner, and logs can be found under the Manage tab.

If a protection component such as the firewall or real-time protection is disabled, the status text and icon for that component turn red:

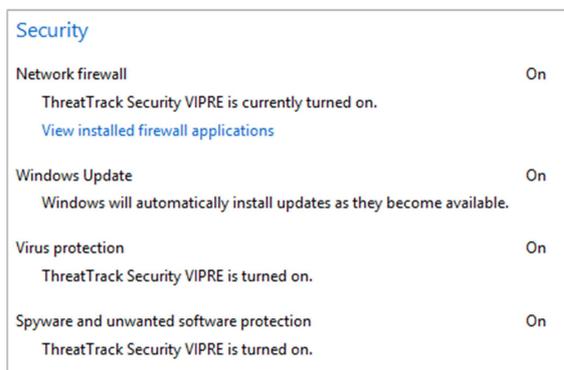


Clicking on the text or symbol of the affected component opens the relevant settings dialog box, from which the item can easily be reactivated.

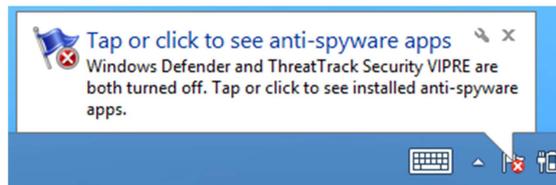
We found the design of the program window to be clear and effective.

### Windows Action Center

VIPRE Internet Security registers with Windows Action Center as the firewall, antivirus and antispyware programs:



If real-time protection or the firewall is disabled, Action Center displays its normal warning:

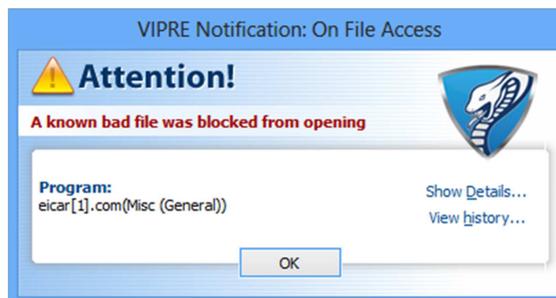


### Standard-user access

We were able to deactivate the real-time protection using a non-administrator account, without having to enter additional credentials. We do not feel this is ideal, especially if the product is used to protect a family computer.

### Malware warnings

Using Internet Explorer in Desktop mode, VIPRE displayed the following alert when the download of the EICAR test file was attempted:



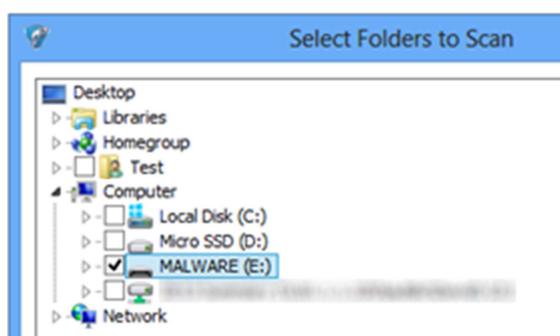
Similar warnings were shown for the AMTSO PUP and cloud protection test files, and also for malware discovered on a USB flash drive. The AMTSO phishing test page is not supported, and no alert is shown.

No alerts are shown in Modern Mode, although they appear on the desktop.

The malware alerts that are shown make clear that the threat has been blocked, do not require any user interaction, and give advanced users the chance to see more details, all of which we find very good.

### *Suitability for touch*

Updating the program and reactivating a protection component can both be done easily with a finger. Scanning a flash drive is much more tricky, as the selection dialog box was clearly designed for use with a mouse:



### *Help and Support*

The Help button opens a traditional Windows Help file, with instructions for everyday tasks. There are some screenshots and hyperlinks to other pages in some of the articles.

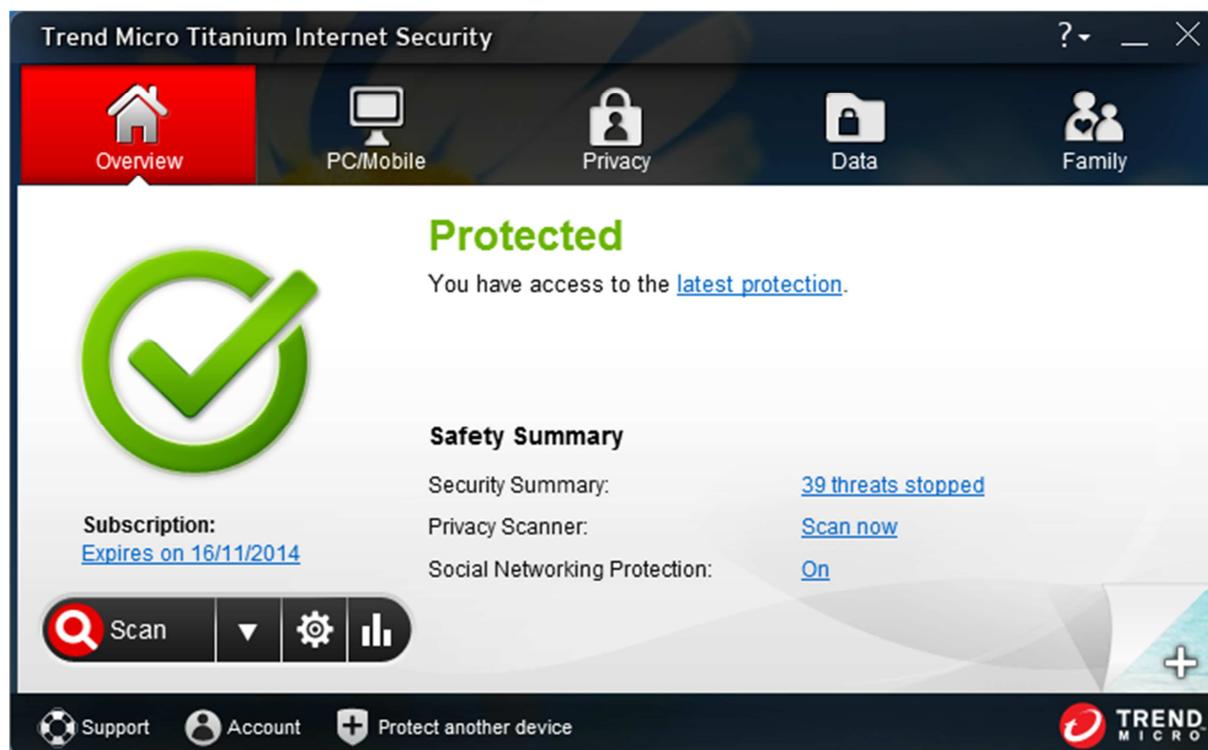
Clicking “VIPRE Product Support” in the Help menu opens the product’s online knowledge base. This at first appears to have only a very limited selection of FAQs, but there is a search function; with this we were able to find clear answers to our queries on setting scan exclusions and setting a scheduled scan. Overall we would describe VIPRE’s help features as good.

### *Summary*

We found the interface of VIPRE Internet Security to be clean, simple and practical. Malware alerts are good, and the program is largely easy to use, at least with mouse and keyboard. We have one suggestion for improvement: non-administrator accounts should not be able to disable protection features.

Website: <http://www.vipreantivirus.com>

## Trend Micro Titanium Internet Security

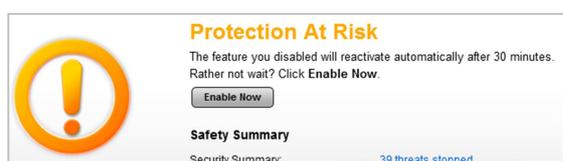


### Installation and interface

Installation is extremely simple, with no decisions to be made.

System status, subscription status, scan, logs and help functions are accessible directly from the homepage of the program. The bar-chart symbol (in the same cluster as the Scan button) opens the logs. An update button is not applicable as the program is cloud-based.

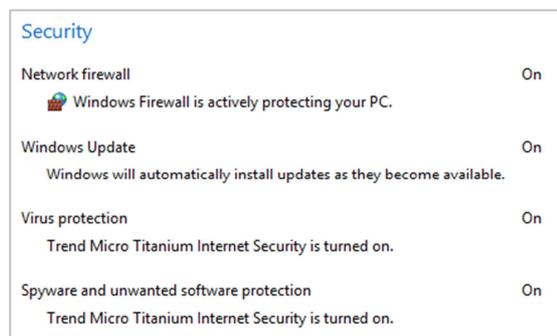
If the real-time protection is deactivated, the text and icon of the status display change, and an “Enable Now” button appears, which will rectify the problem:



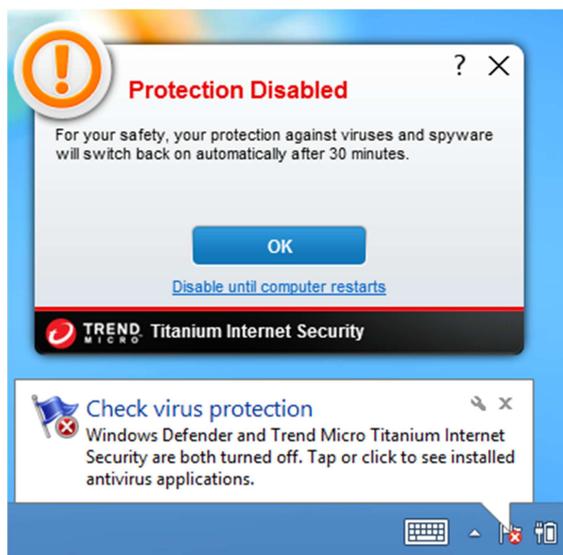
In our opinion, Titanium Internet Security makes all its important functions and information easily accessible from the home page.

### Windows Action Center

The suite registers with Windows Action Center as an antivirus and antispyware program:



If real-time protection is disabled, Windows Action Center shows its normal warning. Additionally, a Trend Micro alert appears, which is displayed until the user clicks “OK”; this is much harder to overlook than the Action Center warning.



**Standard-user access**

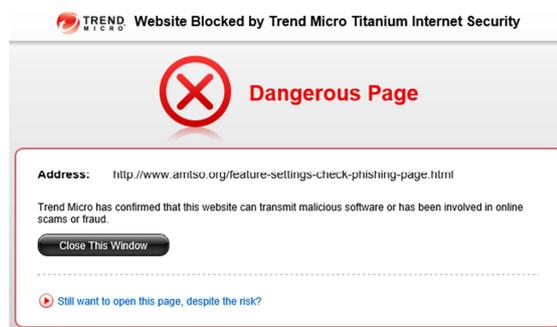
Real-time protection can be disabled using a non-administrator account without any prompt for credentials. We do not find this ideal, especially for a family computer.

**Malware warnings**

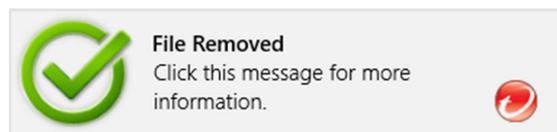
Using Internet Explorer in Desktop Mode, we found the EICAR Drive-by-Download Test was blocked silently. However, an alert was shown for the PUP test:



A similar alert was shown for the Cloud Protection Test. The Phishing Test Page was blocked with the following warning:



When using Internet Explorer in Modern Mode, we again found that the EICAR test file was blocked silently. However, for the PUP and Cloud Protection Tests, a Windows Modern Mode alert was shown:



The Phishing Test Page was blocked with the same alert as in Desktop Mode.

The following alert appeared when the program’s real-time protection detected malware on a USB flash drive:



The alert below was taken from AV-Comparatives’ Real-World Protection Test in October 2013, and shows a user-dependent case:



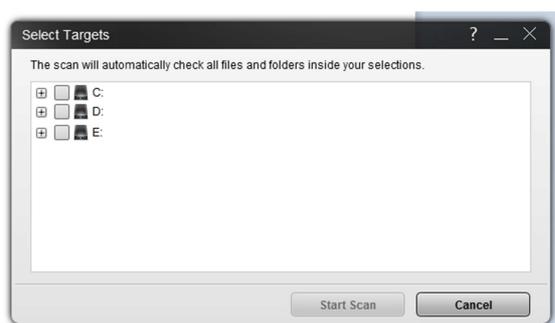
The default option, i.e. what will happen if the user presses the Enter key, is to block the file. However, the user can choose to open it.

Overall, we found Titanium Internet Security's alerts to be clear and reassuring.

### Suitability for touch

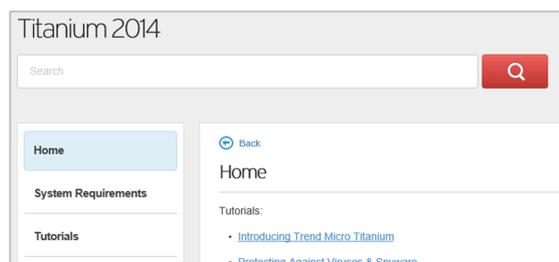
Updating the definitions is not relevant, as the program is cloud-based.

Dismissing the malware alerts in Windows 8's Modern format is easily done with a finger, as is reactivating the protection if it is disabled. Scanning a flash drive is more tricky, as the drive has to be selected in a dialog box meant for mouse use:



### Help and Support

Trend Micro provide online help for Titanium Internet Security, in the form of a searchable product guide:



This provides descriptions of the program's features and instructions for carrying out everyday tasks such as scanning. We would describe it as fairly simple but nonetheless quite adequate. Using the search facility, we were able to find answers to our standard queries on scheduling scans and setting exclusions.

### Summary

Overall, we found Trend Micro Titanium Internet Security 7 to be clear and simple to use. Important features and information are easy to find, and malware alerts are clear and reassuring.

Website: <http://www.trendmicro.com>

	AhnLab V3 Internet Security	avast! Free Antivirus	AVG Internet Security	Avira Internet Security Suite	Bitdefender Internet Security	BullGuard Internet Security	Emsisoft Anti-Malware	eScan Internet Security	ESET Smart Security	Fortinet FortiClient	F-Secure Internet Security
Antimalware	*	*	*	*	*	*	*	*	*	*	*
Antispam			*		*	*		*	*		*
Firewall	*		*	*	*	*		*	*		
Backup				*	*	*					
Parental Controls					*	*		*	*	*	*
System optimisation				*			*				
Game mode	*	*	*	*	*	*	*	*	*		*
Scan entry in Windows Explorer context menu		*	*	*	*	*	*	*	*	*	*
Full installer or downloader	Full	Full/ both	Full/ both	Downloader	Downloader	Downloader	Full	Full	Full/ both	Full	Downloader
Installer provides choice of components		*	*	*							
Installer allows multiple languages to be installed		*	*	*			*	*	*		*
Uninstaller allows components to be changed		*	*	*							*
Uninstaller provides repair option		*	*	*	*				*	*	
Adds toolbar to the browser		*	*	*							
Changes search provider in the browser			*	*							
Rates search results in the browser		*	*	*	*	*					*
Scheduled scan set by default				*						*	
Scan possible in Windows Safe Mode	*	*	*	*	*	*	*	*	*	*	*
Update possible in Windows Safe Mode	*	*		*				*			
Supports Windows XP, Vista, 7, 8	*	*	*	*	*	*	*	*	*	*	*
Boxed product available	*		*	*	*	*	*	*	*		*
Technical support by chat				*	*	*	*	*			*
Technical support by email	*	*	*	*	*	*	*	*	*		*
Price for 1 user, 1 year in Euro	40	FREE	40	45	50	50	40	40	45	FREE	50

	G Data Internet Security	Kaspersky Internet Security	Kingsoft Duba	McAfee Internet Security	Microsoft Windows Defender	Panda Cloud Antivirus Free Edition	Qihoo 360 Internet Security	Sophos Endpoint Security and Control	Tencent QQ PC Manager	ThreatTrack VIPRE Internet Security	Trend Micro Titanium Internet Security
Antimalware	*	*	*	*	*	*	*	*	*	*	*
Antispam	*	*		*						*	*
Firewall	*	*		*						*	
Backup				*							
Parental Controls	*	*		*							*
System optimisation				*			*		*		*
Game mode	*	*	*	*		*	*		*		
Scan entry in Windows Explorer context menu	*	*	*	*		*	*	*	*	*	*
Full installer or downloader	Full/ both	Full	Full	Downloader	Full/ both	Downloader	Full	Full	Full	Downloader	Full/ both
Installer provides choice of components	*			*							
Installer allows multiple languages to be installed	*					*					*
Uninstaller allows components to be changed	*			*							
Uninstaller provides repair option										*	
Adds toolbar to the browser		*		*		*					*
Changes search provider in the browser				*		*					
Rates search results in the browser		*		*			*			*	*
Scheduled scan set by default				*						*	*
Scan possible in Windows Safe Mode		*	*	*	*	*	*	*	*	*	*
Update possible in Windows Safe Mode		*		*		*	*			*	
Supports Windows XP, Vista, 7, 8	*	*	*	*	*	*	*	*	*	*	*
Boxed product available	*	*		*						*	*
Technical support by chat		*	*	*					*	*	*
Technical support by email	*	*	*	*	*			*	*	*	*
Price for 1 user, 1 year in Euro	35	40	FREE	60	FREE	FREE	FREE	45	FREE	30	50

Data is based on versions available as of 1st January 2014 taken from the vendor's website.

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AV-Comparatives e.V. (January 2014)