

Covering the global threat landscape

# VB100 COMPARATIVE REVIEW ON WINDOWS SERVER 2008 R2

### INTRODUCTION

This seems likely to be the last VB100 comparative on the *Windows Server 2008* platform. Now aging somewhat, it has been superseded by the 2012 edition, with another server version of *Windows* expected before the end of 2016.

Our server tests currently include a deeper set of performance measures than are provided in our desktop tests, the extra time required to gather this data usually being balanced out by the somewhat smaller field of participants in server tests. This test saw fewer than 30 submissions – still a decent sized field, but more manageable than some of our busier desktop comparatives.

### **PLATFORM AND TEST SETS**

The platform itself has been fairly dependable over the years, the 'R2' having emerged in late 2009 as the server equivalent of *Windows 7*, also notable for being *Microsoft*'s first operating system supporting only 64-bit architectures. Set-up required little more than for the images used in previous comparatives to be restored, some components to be updated, and our standard set of basic tools to be installed.

The test sets used for this comparative included the latest WildList available on the submission deadline (19 August), v4.020, which was released the very same day. The standard updates were made to the false positive collections, bringing their size to just under 900,000 files. RAP sets were built using all samples first seen in the few weeks either side of the test deadline, with adjustments, as usual, to focus on more prominent and common items (in future comparatives we hope to base these test sets on shared prevalence data from the AMTSO Real-Time Threat List, for greater accuracy).

With everything prepared, we were ready to dive into testing.

# **Agnitum Outpost Security Suite Pro**

Main version: 9.1

Update versions: 4562.701.1951 build 158, build 168,

build 173, build 180

Last 6 tests: 5 passed, 0 failed, 1 no entry Last 12 tests: 10 passed, 0 failed, 2 no entry

ItW on demand100.00%ItW on access100.00%False positives0StabilitySolid

Shortly after testing completed, we heard news of significant changes at *Agnitum*, with the technology behind the company's



Outpost suite being acquired by Russian search giant Yandex; it looks likely that the Outpost line will be retired by the end of 2016. For now, however, it remains a long-standing VB100 participant with a good history of stability and reliability.

Set-up was a little time-consuming, as usual, with a reboot required to complete. The product interface is clear and well designed with a decent basic set of controls. Stability was rock-solid throughout.

RAM use was reasonable, CPU use a little high, and our set of tasks took quite some time to complete. Scanning speeds were fairly fast with good improvements in the warm runs, and file access overheads also improved significantly after the initial settling-in period.

Detection was decent in the main, with a rather uneven spread through the RAP sets, but the WildList was handled



well with no issues in the clean sets and *Agnitum*'s *Outpost* comfortably earns another VB100 award.

### **Avast Business Security 2015**

Main version: 015.10.2.2505

Update versions: 150819-1, 150901-0, 150907-0,

150914-0

Last 6 tests: 6 passed, 0 failed, 0 no entry Last 12 tests: 9 passed, 2 failed, 1 no entry

ItW on demand 100.00% ItW on access 100.00%

Avast Software
has a strong
record in recent
VB100 tests,
with a good run
of passes over
the last year.
The business
edition of the
product was

False positives 0



Stability

submitted for this month's test, which installed rapidly and presented an interface featuring what seems to be the fashion of late: a very dark colour scheme enlivened by flashes of garish colour. The overall feel was reasonably appealing though, with touches of the style that has earned the vendor's home-user offerings regular praise in these pages in the past.

Stability was decent for the most part, but the score was dented by a single unexpected reboot. Memory usage was fairly low, CPU use a touch above the average for this month's set of products, and our set of activities ran through in fairly unexceptional time.

Detection was very strong indeed in the reactive sets, and reasonable into the proactive sets, and with no issues in the WildList sets and nothing more serious than a few warnings of potential 'archive bombs' in the clean sets, a VB100 award is well deserved.

### **AVG CloudCare AntiVirus 2015**

Main version: 2015.0.6125

Update versions: 4401/10465, 4409/10569, 10620,

4419/10649

Last 6 tests: 6 passed, 0 failed, 0 no entry Last 12 tests: 12 passed, 0 failed, 0 no entry

ItW on demand100.00%ItW on access100.00%False positives0StabilityFair

AVG's CloudCare product has been the company's chosen submission to our tests for a while now, with a

Fair



good record of passes. As usual, it installed in decent time with no reboot needed. The interface presented is dark and mysterious with much text subtly greyed out. The layout is fairly simple and sensible though, with a good selection of configuration options.

Stability was mostly OK, but on a few occasions intense scans seemed to cause the system to freeze up, and on one occasion there was an unwanted restart. Resource usage was fairly average for this test, with our set of tasks not too significantly slowed down. Both scanning speeds and file access lags showed significant improvement after initial familiarization with the system and files.

Detection was very strong, with good coverage everywhere, and with no problems in the core sets a VB100 award is comfortably earned by *AVG*.

## **Avira Server Security**

Main version: 14.0.11.378

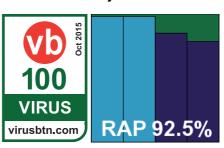
Update versions: 7.12.01.14, 7.12.05.214, 7.12.07.78,

7.12.08.204

Last 6 tests: 5 passed, 0 failed, 1 no entry Last 12 tests: 10 passed, 0 failed, 2 no entry

ItW on demand100.00%ItW on access100.00%False positives0StabilityFair

Avira's server solution is a full-blown enterprise tool with controls based on the MMC system, but set-up proved fairly simple and



navigating the interface was not too taxing. The layout is reasonably intuitive and a good level of fine-tuning is available.

Stability was good in normal use, but a number of malware scans failed to complete. Resource usage was on the low

side and our set of tasks ran through in reasonable time. Scanning was reasonably fast too, and file access lag times very low indeed, helped by the fact that most file read operations were ignored.

Detection was strong, with only a slight downturn into the later parts of the RAP sets, and with another flawless run over the certification sets a VB100 award goes to *Avira*.

### **Bitdefender Endpoint Security**

Main version: 5.3.23.709

Update versions: 7.62115, 7.62334, 7.62432, 7.62516

Last 6 tests: 6 passed, 0 failed, 0 no entry Last 12 tests: 12 passed, 0 failed, 0 no entry

ItW on demand100.00%ItW on access100.00%False positives0StabilitySolid

Also boasting an impeccable record in our tests in recent years, *Bitdefender*'s engine is the most popular with OEM and rebranding



providers, by quite some distance. This month the installation took a little while to complete but once done presented the usual stark and minimalist interface, which still manages to provide a decent set of configuration options despite its apparent simplicity.

Stability was flawless. Memory use was a little above the average recorded this month, but CPU use was very low indeed and our set of tasks ran through in good time. Scanning speeds were OK, and overheads very light indeed.

Detection was as excellent as ever, with only the slightest downward trend through the RAP sets, and with a clean sweep of the core sets, *Bitdefender*'s unbroken run of VB100 passes continues.

# **CYREN Command Anti-Malware**

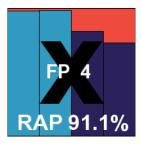
Main version: 5.1.35 Update Versions: 5.4.20

Last 6 tests: 0 passed, 5 failed, 1 no entry Last 12 tests: 2 passed, 7 failed, 3 no entry

ItW on demand100.00%ItW on access100.00%False positives4StabilitySolid

CYREN's product seems to have changed very little, on the surface at least, in quite some time.

Lately, it has been putting in some very strong performances with excellent detection and solid stability, although false positive issues have stood in the way of certification. This month, the install was as fast and simple as



ever, the interface as usual very simple and minimalist, but still managing to provide a decent basic set of controls.

Stability was once again rock-solid with no issues noted at all. Memory usage was very low indeed, CPU use a little above average. Scanning speeds were fairly slow, file access overheads fairly high, and our set of standard tasks was slowed down noticeably.

Detection was very strong, with superb numbers in the reactive sets where the company's cloud look-up system was in play, and still pretty strong in the offline proactive sets. The WildList was covered without issues, but once again the clean sets revealed a small number of false alarms, meaning there is still no VB100 award for *CYREN* despite yet another otherwise good showing.

## **Defenx Security Suite**

Main version: 9.1

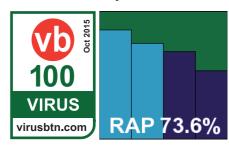
Update versions: 4562.701.1951 build 158, build 168,

build 173, build 180

Last 6 tests: 5 passed, 0 failed, 1 no entry Last 12 tests: 10 passed, 0 failed, 2 no entry

ItW on demand100.00%ItW on access100.00%False positives0StabilitySolid

The *Defenx* product is closely related to *Agnitum*'s *Outpost*, and as such its future may be affected by the acquisition by *Yandex* of



Agnitum's malware protection technologies. *Defenx* has been a regular in VB100 comparatives for many years now, with a good record of successes. Installation is a little lengthy, due to the wide range of components included in this full suite, but the interface is slick and responsive with a clear and simple layout and a good range of configuration options.

Stability was impeccable, with nothing to report. Our performance measures show fairly high resource usage and a rather heavy impact on our set of activities, but both scanning speeds and file access times showed significant improvements in the warm runs, indicating some good optimizations.

Detection was a little below par but still reasonably good in the reactive sets, dropping away rather sharply into the proactive parts of the RAP test. The core certification sets were handled well though, and a VB100 award is earned by *Defenx*.

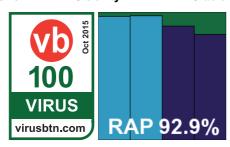
#### **Emsisoft Anti-Malware**

Main version: 10.0.0.5631 Update versions: 10.0.0.5461

Last 6 tests: 5 passed, 0 failed, 1 no entry Last 12 tests: 9 passed, 1 failed, 1 no entry

ItW on demand100.00%ItW on access100.00%False positives0StabilityStable

Another implementer of the popular *Bitdefender* engine alongside its own technology, the *Emsisoft* product has



also been doing well in our comparatives of late with a good run of passes. The installation of the latest edition proved speedy and the interface looked bright, colourful and attractive with a sensible layout and a good set of configuration options.

Stability was mostly very good, with just a single scan job not quite completing correctly, and resource use was low with a below-average impact on our set of tasks. Scanning speeds were pretty good too, and file access lag times were very low.

Detection was excellent, with just a slight downward trend through the RAP sets, and with a perfect score in the core sets *Emsisoft* comfortably earns a VB100 award.

#### eScan ISS Server Edition

Main version: 14.0.1400.1796 DB Update versions: 14.0.1400.1789 DB Last 6 tests: 6 passed, 0 failed, 0 no entry Last 12 tests: 11 passed, 1 failed, 0 no entry ItW on demand100.00%ItW on access100.00%False positives0StabilityFair

The server solution from eScan is a regular participant in our server tests, complementing its desktop sibling and helping build



a very strong record of passes; once again the *Bitdefender* engine is included in the mix. Set-up was somewhat time-consuming, but eventually completed to reveal an interface with a modern tiled layout and some splashes of colour to brighten the drab background. Configuration options are provided in excellent depth, and are easy to access and navigate.

Stability was shaken by a few problems with large scan jobs and some cases of the on-access component taking a while to kick in, but for the most part things went smoothly. Resource use was low and our set of tasks ran through in good time; scanning speeds were fast too, and file read overheads not too heavy.

Detection was excellent in the reactive sets, a little lower in the offline parts of the RAP test, suggesting that slightly older definitions had been included in the version submitted. The core certification sets were handled without problems though, and another VB100 award goes to *eScan*.

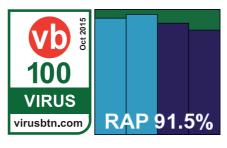
### **ESET Endpoint Antivirus**

Main version: 6.2.2021.0

Update versions: 12118, 12184, 12213, 12250 Last 6 tests: 6 passed, 0 failed, 0 no entry Last 12 tests: 12 passed, 0 failed, 0 no entry

ItW on demand100.00%ItW on access100.00%False positives0StabilitySolid

ESET's business endpoint solution has been the company's submission of choice for our server tests for a while now, and in conjunction



with the NOD32 consumer product, has helped maintain

a superb unbroken string of VB100 passes. Installation this month was not the fastest but not too slow either, and as usual the interface is slick and appealing with a nice intuitive layout and a comprehensive set of configuration options within easy reach.

Stability was impeccable once again, with no problems even under the heaviest of stress. Resource use was low and our set of activities ran through in good time. Scanning speeds were good to start off with and much faster in repeat runs, and overheads accessing files were very light.

Detection was very strong too, with good scores across the board, and another clean sweep of the certification sets means yet another VB100 award for *ESET*.

#### **ESTsoft ALYac 3**

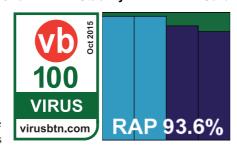
Main version: 3.0.0.4

Update versions: 13.3.21.1/558925.2015081915/7.62115 /5861651.20150819, 13.3.21.1/562295.2015090322/7.62 332/5769232.20150903, 13.3.21.1/562868.2015901001/7.62428/5702159.20150909, 13.3.21.1/563522.2015091 701/7.62515/5717726.20150916

Last 6 tests: 5 passed, 0 failed, 1 no entry Last 12 tests: 10 passed, 0 failed, 2 no entry

ItW on demand100.00%ItW on access100.00%False positives0StabilitySolid

Another product integrating the *Bitdefender* engine, *ESTsoft*'s *ALYac* has also achieved a nice string of passes of late. The



current version has changed little over the last few years, and as usual installs rather slowly, most likely thanks to the distance of our test lab from the company's core markets. The interface is fairly clear, if a little wordy, and as ever adorned with cute cartoon icons.

Stability was very good with no issues to report, and resource use was pretty minimal too. Our set of tasks took a fair while to complete, and both scanning speeds and overheads were a little sluggish initially, but improved greatly in the warm runs.

Detection was superb, with very high numbers across the board, and with no issues in the core sets a VB100 award is easily earned by *ESTsoft*.

### **Fortinet FortiClient**

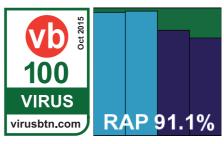
Main version: 5.0.9.1349

Update versions: 5.220/27.470, 27.758, 27.901, 28.035

Last 6 tests: 5 passed, 0 failed, 1 no entry Last 12 tests: 9 passed, 1 failed, 2 no entry

ItW on demand100.00%ItW on access100.00%False positives0StabilityStable

Fortinet continues to build an excellent run of passes too, with only a couple of 'not-quites' in the last five years.



The product's installation process remains fairly zippy and the interface is minimal with only the most basic of configuration options, the bulk of the controls being reserved for central management.

Stability was almost perfect, our rating only dented by a single issue – a fairly minor one, where an update failed to complete smoothly. Resource usage was a little above this month's average, but our set of tasks was not overly impeded. Scanning speeds were reasonable, and file access times a little slow at first but much faster after initial familiarization.

Detection was very good too, with a slight downward trend into the proactive sets, and with perfect coverage of the certification sets another VB100 award goes to *Fortinet*.

#### **G Data Antivirus Business**

Main version: 13.2.0.257

Update versions: AVA 25.3095/GD 25.5475, AVA 25.3314/GD 25.5543, AVA 25.3424/GD 25.5561, AVA

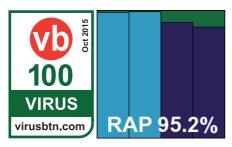
25.3499/GD 25.5592

Last 6 tests: 5 passed, 0 failed, 1 no entry Last 12 tests: 9 passed, 0 failed, 3 no entry

ItW on demand100.00%ItW on access100.00%False positives0StabilityStable

G Data's business solution is a full-on enterprise product with a central management console and client-side agents with their own basic interface. For our tests we installed both the admin tool and the client on the test machines, meaning the set-up time was rather longer than it would be for most endpoint deployments. The admin interface is

clean and well laid out with a comprehensive set of controls and a relatively simple and effective deployment and management process. The



client side also provides a good set of configuration options once enabled by the administrator.

Stability was mostly good but we did manage to overload things a couple of times, once by trying to export an epic log file and once when running a heavy-duty scan. The product recovered its poise fairly quickly though. Our performance figures may be slightly skewed by running both ends of the product on the same system, but they show resource usage only slightly above this month's average and a fairly high but not excessive slowdown of our set of activities. Speed measures show fairly decent scan times and fairly heavy lag times accessing files.

Detection, as always, was very high indeed, thanks to the combination of the *Bitdefender* engine and the company's own technologies, and with a clean run through the certification sets a VB100 award is easily earned.

#### Ikarus anti.virus

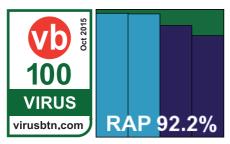
Main version: 2.8.20

Update versions: 93058, 2.8.31/93310, 93401, 93557

Last 6 tests: 4 passed, 0 failed, 2 no entry Last 12 tests: 7 passed, 1 failed, 4 no entry

ItW on demand100.00%ItW on access100.00%False positives0StabilityStable

Ikarus has a fairly decent record in recent tests. The product installs quite slowly and presents an interface that has become very familiar



from its many appearances on the VB test bench; the layout is a little unusual but soon becomes simple to navigate with a little exploring.

Stability was very good, the only incident of note being an oddity with the interface, which vanished at the end of one

scan. Resource use was fairly low and our set of activities completed pretty quickly. Scanning speeds were reasonable too, but our file access lag measures were rather high, even with some optimization on repeat visits to the same files.

Detection was very strong, and with no issues in the core sets a VB100 award is earned by *Ikarus*.

### iSheriff Security From the Cloud

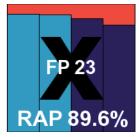
Main version: 5.7.1.0812

Update versions: 5.6.0/3.71, 5.7.3.0000, 5.7.3.0909

Last 6 tests: 4 passed, 1 failed, 1 no entry Last 12 tests: 9 passed, 1 failed, 2 no entry

ItW on demand100.00%ItW on access100.00%False positives23StabilitySolid

iSheriff is another product making use of the Bitdefender engine and another full enterprise solution, this time with the management system accessed via a cloud-based portal. The web interface is complex and detailed but reasonably simple to navigate with a little practice, and it provides a fairly thorough



set of configuration options. Deployment of the client was straightforward too, with a button providing a link to a pre-prepared installer bundle.

Stability was very good indeed, with nothing to report, and resource usage was low with minimal impact on our set of activities. Scanning speeds were decent too, with a fairly low overhead accessing files.

Detection was pretty strong, although somewhat behind others using the same engine in the reactive sets. The WildList sets were covered without difficulty and in two of our three standard runs there were no problems in the clean sets either, but in one, a rash of false alarms popped up, all flagged as 'CloudScan' and grouped into two or three detection identities. Most of the alerts were labelled as heuristic detections but at least one, a simple text file, claimed to be the Zlob trojan. The absence of such issues in later runs suggests that there was a temporary blip in the company's cloud reputation system, but that blip was enough to deny *iSheriff* a VB100 award this month.

### **K7 Internet Security**

Main version: 15.1.0276

Update versions: 9.209.16940, 9.209.17080,

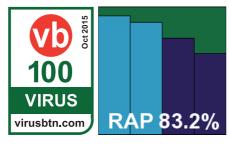
9.209.17130, 9.210.17209

# K7 Internet Security contd.

Last 6 tests: 5 passed, 0 failed, 1 no entry Last 12 tests: 8 passed, 1 failed, 3 no entry

ItW on demand 100.00% ItW on access 100.00% False positives 0 Stability Solid

After a spell of only occasional appearances in our tests, K7 seems to be firmly back to regular VB100 testing, with a run of good showings over



the last year or so. This month the product installed very quickly, presenting its usual militaristic interface with a good set of controls.

Stability was excellent, standing up to everything we could throw at it. RAM use was on the high side, but CPU use was very low, and our set of tasks wasn't too greatly impeded. Scanning speeds were blazing fast after the initial runs, which weren't too slow themselves, while overheads started off reasonable and soon became barely detectable.

Detection was pretty decent too, with a steady decline through the sets, and with another clean run through the core sets, K7 picks up another VB100 award.

## Kaspersky Endpoint Security 10 for Windows

Main version: 10.2.2.10535(mr1)

Update versions: N/A

Last 6 tests: 5 passed, 0 failed, 1 no entry Last 12 tests: 10 passed, 0 failed, 2 no entry

False positives 0

ItW on demand 100.00% ItW on access Stability

100.00% Stable

Kaspersky Lab once again entered both an enterprise and a small business product for testing this month. We start with the 'Endpoint Security' edition, which took some time to set up and required a reboot after the initial update, but once up it presented the usual highly polished interface, replete with fine-tuning options to satisfy even the most demanding admin.



Stability was good, with only one pretty minor issue noted: after one install the GUI indicated a 'malfunction' in several components, which was quickly rectified with no input from the test team and seemed to cause no problems thereafter, but was adjudged enough to count as a single point in our rating schema.

Memory usage was low, CPU use a shade above average, and our set of activities completed in very good time. Scanning speeds were not super-fast at first but certainly were after warming up, and similar optimizations kicked in when accessing files too, the overhead barely detectable after the first run.

Once again our RAP measures were unusable, but the core sets were handled impeccably and a VB100 award is comfortably earned.

## Kaspersky Small Office Security 4 File Server

Main version: 15.0.2.361(C) Update versions: N/A

Last 6 tests: 4 passed, 0 failed, 1 no entry Last 12 tests: 8 passed, 0 failed, 4 no entry

ItW on demand 100.00% ItW on access Stability False positives 0

100.00% Solid

Kaspersky's second product this month caters to the small business market. Again, the set-up took a fair while, mainly completing the initial updates, and in the end the usual clean and appealing interface was provided, crammed with options but never feeling cluttered or difficult to find one's way around.



Stability was very good, with no problems to report. Resource use was pleasingly light and a good time was recorded through our set of activities. Scanning speeds and file access overheads benefited from the same excellent optimizations as the enterprise product, this time from an even lighter starting point in the lag time

Detection figures were unavailable once again, but the WildList was fully covered, and with no issues in the clean sets, Kaspersky earns yet another VB100 award.

### **Norman Security Portal**

Main version: 7.62115

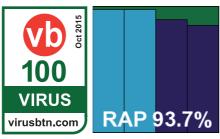
Update versions: 5861651, 7.62335/5762862,

7.62442/5712482, 7.62517/5710306 Last 6 tests: 5 passed, 0 failed, 1 no entry Last 12 tests: 9 passed, 1 failed, 2 no entry

## Norman Security Portal contd.

ItW on demand100.00%ItW on access100.00%False positives0StabilitySolid

Another product incorporating the *Bitdefender* engine, *Norman*'s cloud portal solution is another with central management



online and only very basic controls at the client side. It nevertheless proved simple to install and operate.

Stability was flawless throughout our tests, resource usage light, and our set of tasks completed rapidly. Scanning speeds were decent too, and file access lag times nice and light.

Detection was excellent, closely mirroring other products using the same technology, and another clean run through the core sets was recorded, earning *AVG*-owned *Norman* another VB100 award.

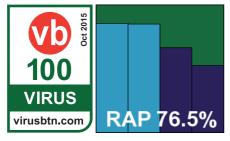
### **Panda Endpoint Protection**

Main version: 7.20.0 Update versions: 7.20.2

Last 6 tests: 5 passed, 0 failed, 1 no entry Last 12 tests: 10 passed, 0 failed, 2 no entry

ItW on demand100.00%ItW on access100.00%False positives0StabilityFair

Panda's business solution has been doing well in our tests lately, with a good run of passes. The installation is a little drawn-out,



but once complete presents the usual very simple client-side interface, which operates in tandem with a more detailed online management portal.

Stability was a little shaky, with a number of scan jobs crashing out or freezing up, and the management tool crashing on one occasion too. Use of local memory

and CPU cycles was very low indeed, but there was a discernible slowdown of our set of tasks. File access lags were also noticeable, and scanning speeds were not the fastest.

Detection was decent but not spectacular in the reactive sets, dropping off considerably but remaining respectable in the proactive part of the RAP test, despite the lack of access to the product's considerable cloud resources. The WildList sets and clean sets were handled nicely, and a VB100 award is merited.

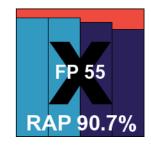
### **PC Pitstop PC Matic Home Security**

Main version: 1.0.0.55 Update versions: N/A

Last 6 tests: 1 passed, 3 failed, 2 no entry Last 12 tests: 2 passed, 5 failed, 5 no entry

ItW on demand 99.04% False positives 55

PC Pitstop's product isn't really intended for server admins, but seemed quite happy to run on this month's server test platform, installing in rapid time. The interface focuses on system information, referring to the platform rather quaintly as 'Windows 7 Server' and digging around for



100.00%

Fair

ItW on access

Stability

software in need of updating. Configuration options for the anti-malware component are limited, but the basics are covered.

The 'fair' stability rating reflects only a single issue but a fairly significant one, essentially disabling the on-demand scanning component over several installs. However, the issue was already known to the developers and a fix came rapidly. Resource use was a little high and our set of tasks ran a little slowly, but scanning speeds were blindingly fast. Overheads were a little high, but not excessive.

Detection, aided by the whitelisting component at the core of the product, was pretty decent in the reactive sets and very strong indeed in the proactive sets where most solutions show significant decreases in coverage. The WildList sets were covered properly on access where the whitelisting is operational, but on demand there were a small number of misses, and in the clean sets there were a batch of false alarms, including items from *Adobe* and the *Windows App* store, meaning once again no VB100 award for *PC Pitstop*.

### **Quick Heal AntiVirus Server Edition**

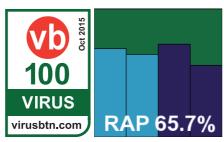
Main version: 16.00(9.0.0.49) 64Bit

Update versions: N/A

Last 6 tests: 3 passed, 0 failed, 3 no entry Last 12 tests: 6 passed, 1 failed, 5 no entry

ItW on demand100.00%ItW on access100.00%False positives0StabilitySolid

Quick Heal's standard business product was not too speedy to set up this month, but at least the install and update dialogs featured



a little colour, in contrast to the main interface which is presented in stark black-and-white. The design is clean and clear though, with a standard tiled layout providing a good set of controls.

Stability was perfect, with no problems noted. Memory use was rather high, but CPU use low, and our set of tasks did show a fair amount of slowdown. Scanning speeds were not the fastest, and our file access lag measures showed significant impact, but this was much lighter after initial checks.

Detection was rather mediocre in the reactive sets, showing a strange spike in the first part of the proactive set before falling away again. The certification sets were well handled though, and *Quick Heal* earns a VB100 award without too much fuss.

### **Quick Heal Segrite Antivirus Server Edition**

Main version: 16.00(9.0.0.49) 64Bit

Update versions: N/A

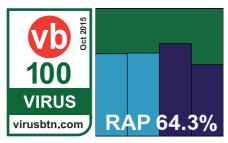
Last 6 tests: 3 passed, 0 failed, 3 no entry Last 12 tests: 3 passed, 0 failed, 9 no entry

ItW on demand100.00%ItW on access100.00%False positives0StabilityFair

Quick Heal's Seqrite range is aimed at larger enterprise customers, but on the surface at least, the server edition seemed little different from the standard business product, using the same black-and-white colour scheme and taking a similarly long time to install.

Stability was shaken by a few incidents where the scanner got stuck plugging through large sets of malware, but was

otherwise OK. Resource usage was high in some areas and low in others, with a fair but not over-the-top impact on our set of tasks,



decent scanning

speeds, and file access overheads a touch high at first but improving quickly.

Detection was again not the best but just about within the bounds of respectability, and the core sets were properly dealt with, earning *Segrite* a VB100 award too.

### Tencent PC Manager

Main version: 11.0.25898.501

Update versions: N/A

Last 6 tests: 3 passed, 0 failed, 3 no entry Last 12 tests: 8 passed, 0 failed, 4 no entry

ItW on demand100.00%ItW on access100.00%False positives0StabilitySolid

Chinese web and IM giant *Tencent* returned to our test bench in the last comparative and is back again this month. The



international version of the product is very different from the Chinese-language editions of old, with a very clean and simple interface providing clear, basic information and easy access to controls. Installation was extremely speedy.

Stability was also very good with no problems noted, and while memory usage was rather high, there wasn't too much use of CPU cycles and our set of activities completed in very good time. Scanning speeds were reasonable and file access lag times were barely impacted, mainly thanks to a lack of on-read scanning by default.

Detection, aided as usual by the *Avira* engine, was very strong indeed with only the slightest dip into the later parts of the RAP sets, and with a clear run through the certification sets, *Tencent* earns another VB100 award.

# ThreatTrack VIPRE Internet Security 2015

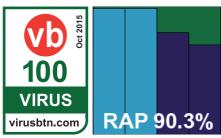
Main version: 8.4.0.17

Update versions: 3.9.2671.2 /43026, 43456, 43578, 43770

Last 6 tests: 3 passed, 0 failed, 3 no entry Last 12 tests: 5 passed, 0 failed, 7 no entry

ItW on demand100.00%ItW on access100.00%False positives0StabilityStable

ThreatTrack
Security's
VIPRE engine
is a relatively
young beast
compared
to many in
this month's
test, but has



built up quite a reputation for itself over the last few years. Installation wasn't too time-consuming and the latest edition of the interface is quite attractive: another very clean and simple layout but still managing to provide some decent controls and settings.

Stability was mostly very good with only a couple of errors during install, which seemed to be fairly transient. Memory usage was a shade below this month's average, CPU use a touch above, and our set of tasks wasn't hindered too much. Scanning speeds were a touch slow initially, but very fast on repeat jobs, with file read overheads showing similar improvements in later runs.

Detection was very good indeed in the reactive sets, dropping off fairly steeply into the proactive sets, and with another clean run over the core sets, *ThreatTrack* earns another VB100 award.

## **TrustPort Antivirus 2015**

Main version: 2015(15.0.3.5432)

Update versions: N/A

Last 6 tests: 4 passed, 0 failed, 2 no entry Last 12 tests: 7 passed, 0 failed, 5 no entry

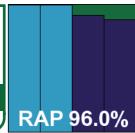
ItW on demand100.00%ItW on access100.00%False positives0StabilityStable

Perennial high-performer *TrustPort* installed a little slowly on this occasion. The interface is a fairly simple tiled affair with a more comprehensive control panel also available.

Stability was good with just a few minor issues, the most significant of which was a loss of connection between parts of the product which required a reboot to rectify but did not recur. Resource use was light and our set of tasks ran

through in good time, but file read overheads were rather high and scanning speeds not too impressive.





Detection was as superb as

ever though, with very little missed and only the slightest downturn through the RAP sets; a flawless run through the certification sets earns *TrustPort* another VB100 award.

#### **UNTESTED PRODUCTS**

This month all products submitted for public testing were included in the final report.

#### CONCLUSIONS

Another good month with a high pass rate and most products proving stable and reliable, as seems to be the way with our server tests. Of those that didn't quite reach certification, the main point of failure was false positives as usual – it's worth pointing out that the false positive numbers are mostly fairly small, and even smaller when viewed as a fraction of the entire clean set used for the test, as usual pushing close to a million files. On the stability side, no products were rated worse than 'fair', which should please the end-users as much as it does the lab team.

#### **Technical details**

All tests were run on identical systems with AMD A6-3670K Quad Core 2.7GHz processors, 4GB DUAL DDR3 1600MHz RAM, dual 500GB and 1TB SATA hard drives and gigabit networking, running *Microsoft Windows Server 2008 R2*.

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	On demand	On access	Clea	n sets	
Certification tests	Standard WildList	Standard WildList	FP	Warnings	VB100
Agnitum Outpost Security Suite Pro	100.00%	100.00%			VIRUS 100
Avast Business Security 2015	100.00%	100.00%		30	VIRUS
AVG CloudCare AntiVirus 2015	100.00%	100.00%		1	VIRUS
Avira Server Security	100.00%	100.00%			VIRUS
Bitdefender Endpoint Security	100.00%	100.00%			VIRUS
CYREN Command Anti-Malware	100.00%	100.00%	4		X
Defenx Security Suite	100.00%	100.00%			VIRUS
Emsisoft Anti-Malware	100.00%	100.00%			VIRUS
eScan ISS Server Edition	100.00%	100.00%			VIRUS
ESET Endpoint Antivirus	100.00%	100.00%			VIRUS
ESTsoft ALYac 3	100.00%	100.00%			VIRUS
Fortinet FortiClient	100.00%	100.00%			VIRUS
G Data Antivirus Business	100.00%	100.00%			VIRUS
Ikarus anti.virus	100.00%	100.00%			VIRUS
iSheriff Security From the Cloud	100.00%	100.00%	23		X
K7 Internet Security	100.00%	100.00%			VIRUS
Kaspersky Endpoint Security 10 for Windows	100.00%	100.00%			VIRUS
Kaspersky Small Office Security 4 File Server	100.00%	100.00%			VIRUS
Norman Security Portal	100.00%	100.00%			VIRUS
Panda Endpoint Protection	100.00%	100.00%			VIRUS
PC Pitstop PC Matic Home Security	99.04%	100.00%	55		X
Quick Heal AntiVirus Server Edition	100.00%	100.00%			VIRUS
Quick Heal Seqrite Antivirus Server Edition	100.00%	100.00%			VIRUS
Tencent PC Manager	100.00%	100.00%			VIRUS
ThreatTrack VIPRE Internet Security 2015	100.00%	100.00%			VIRUS
TrustPort Antivirus 2015	100.00%	100.00%			VIRUS

Install time (m)*	Reboot required	Fully 64-bit	Third-party engine technology †	Stability score	Stability rating
8:30	√	√		0	Solid
2:30	X	√		5	Fair
3:45	X	X		7.5	Fair
3:00	X	X		10	Fair
6:30	X	$\sqrt{}$		0	Solid
3:45	X	√		0	Solid
10:15	√	$\sqrt{}$	Agnitum	0	Solid
5:45	X	X	Bitdefender	1	Stable
12:15	X	X	Bitdefender	9.5	Fair
8:15	√	$\sqrt{}$		0	Solid
15:15	X	$\sqrt{}$	Bitdefender	0	Solid
6:15	X	X		2	Stable
29:00	√	X	Bitdefender	3	Stable
12:45	X	X		1	Stable
4:30	X	X	Bitdefender	0	Solid
2:30	X	X		0	Solid
11:00	√	X		1	Stable
20:00	X	X		0	Solid
5:15	X	$\sqrt{}$	Bitdefender	0	Solid
7:00	X	X		5	Fair
3:15	X	X	ThreatTrack	10	Fair
9:30	X	√		0	Solid
11:30	X	√		5	Fair
0:45	X	X	Avira	0	Solid
6:15	X	X		2	Stable
8:00	X	X	AVG, Bitdefender	3	Stable
	time (m)* 8:30 2:30 3:45 3:00 6:30 3:45 10:15 5:45 12:15 8:15 15:15 6:15 29:00 12:45 4:30 2:30 11:00 20:00 5:15 7:00 3:15 9:30 11:30 0:45 6:15	time (m)*  8:30	time (m)*       Reboot required (64-bit)       Fully 64-bit         8:30 $\sqrt{}$ $\sqrt{}$ 2:30       X $\sqrt{}$ 3:45       X       X         6:30       X $\sqrt{}$ 3:45       X $\sqrt{}$ 5:45       X       X         12:15       X       X         8:15 $\sqrt{}$ $\sqrt{}$ 4:30       X       X         29:00 $\sqrt{}$ X         12:45       X       X         4:30       X       X         2:30       X       X         11:00 $\sqrt{}$ X         20:00       X       X         7:00       X       X         3:15       X $\sqrt{}$ 7:00       X       X         11:30       X $\sqrt{}$ 0:45       X       X	time (m)*         Reboot required (m)*         Fully 64-bit technology $^{\uparrow}$ Third-party engine technology $^{\uparrow}$ 8:30 $\sqrt{}$ $\sqrt{}$ $\sqrt{}$ 2:30         X $\sqrt{}$ $\sqrt{}$ 3:45         X         X $\sqrt{}$ 6:30         X $\sqrt{}$ $\sqrt{}$ 6:30         X $\sqrt{}$ $\sqrt{}$ 3:45         X $\sqrt{}$ $\sqrt{}$ 10:15 $\sqrt{}$ $\sqrt{}$ Agnitum           5:45         X         X         Bitdefender           12:15         X         X         Bitdefender           8:15 $\sqrt{}$ $\sqrt{}$ Bitdefender           6:15         X         X         Agnitum           15:15         X $\sqrt{}$ Bitdefender           12:45         X         X         Agnitum           12:45         X         X         X           4:30         X         X         Agnitum           2:30         X         X         X           5:15         X $\sqrt{}$	time (m)* required (64-bit fechnology fequine fequined (m)* score fequined (64-bit fechnology fequine fechnology fequine fechnology fequine fechnology fequine fechnology fequine fechnology fequine

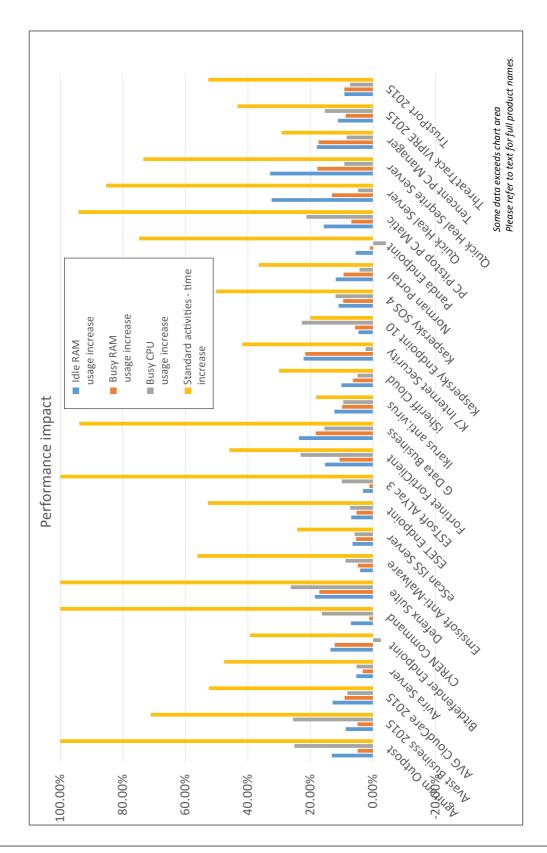
<sup>0 =</sup> Solid 0.1 - 4.9 = Stable 5 - 14.9 = Fair 15 - 29.9 = Buggy 30 + = Flaky

<sup>†</sup> Only records presence of third-party scanning engines, most products will include additional in-house technologies



<sup>\*</sup> Install time includes initial updates and time to enable on-access protection (assuming reasonable typing speed and familiarity with product operation)

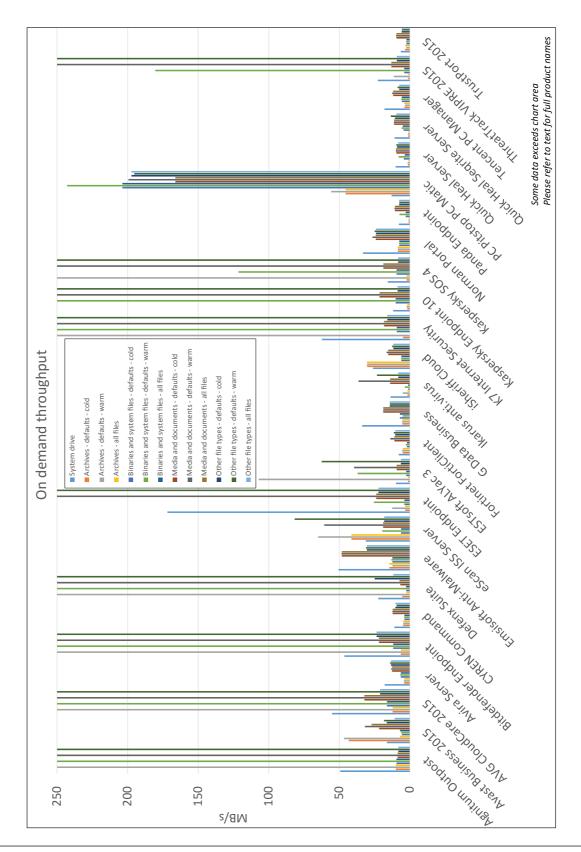
Performance measures	Idle RAM usage increase	Busy RAM usage increase	Busy CPU usage increase	Standard activities - time increase
Agnitum Outpost Security Suite Pro	13.20%	4.92%	25.15%	224.10%
Avast Business Security 2015	8.76%	4.95%	25.54%	71.08%
AVG CloudCare AntiVirus 2015	12.93%	9.08%	8.23%	52.44%
Avira Server Security	5.33%	3.26%	5.27%	47.66%
Bitdefender Endpoint Security	13.62%	12.26%	-2.54%	39.32%
CYREN Command Anti-Malware	7.07%	1.21%	16.38%	189.47%
Defenx Security Suite	18.59%	17.16%	26.27%	171.25%
Emsisoft Anti-Malware	4.14%	4.89%	8.81%	56.18%
eScan ISS Server Edition	6.55%	5.42%	5.88%	24.23%
ESET Endpoint Antivirus	6.97%	5.29%	7.33%	52.80%
ESTsoft ALYac 3	3.21%	1.15%	9.98%	109.52%
Fortinet FortiClient	15.35%	10.71%	23.18%	45.92%
G Data Antivirus Business	23.69%	18.32%	15.55%	93.95%
Ikarus anti.virus	12.36%	9.83%	9.52%	18.20%
iSheriff Security From the Cloud	10.10%	6.40%	4.97%	30.07%
K7 Internet Security	22.19%	21.67%	2.38%	41.83%
Kaspersky Endpoint Security 10 for Windows	4.62%	5.77%	22.80%	20.03%
Kaspersky Small Office Security 4 File Server	11.03%	9.54%	11.98%	50.18%
Norman Security Portal	11.92%	9.43%	4.30%	36.52%
Panda Endpoint Protection	5.55%	0.96%	-4.11%	74.80%
PC Pitstop PC Matic Home Security	15.76%	6.93%	21.29%	94.17%
Quick Heal AntiVirus Server Edition	32.42%	13.12%	4.75%	85.35%
Quick Heal Seqrite Antivirus Server Edition	32.91%	17.80%	9.16%	73.46%
Tencent PC Manager	17.92%	17.42%	8.42%	29.21%
ThreatTrack VIPRE Internet Security 2015	11.24%	8.72%	15.40%	43.35%
TrustPort Antivirus 2015	9.15%	9.17%	7.37%	52.64%



On-demand	System	A	rchive file	S	Binarie	s and syste	em files	Media	and docu	ments	Ot	her file typ	pes
throughput (MB/s)	drive*	Default (cold)	Default (warm)	All files									
Agnitum Outpost	49.29	9.90	1820.96	9.90	9.50	1578.72	9.50	8.69	1184.11	8.69	8.13	2104.96	8.13
Avast Business Security	16.25	43.36	46.69	6.95	5.61	6.21	7.02	21.78	31.84	27.10	16.40	18.30	10.74
AVG CloudCare	55.17	12.22	606.99	12.22	16.23	823.75	16.23	32.22	1114.52	32.22	21.12	1184.11	21.12
Avira Server Security	17.82	4.04	4.29	4.04	6.42	6.80	6.42	12.66	13.24	12.66	13.35	13.99	13.35
Bitdefender E.S.	46.44	6.43	1366.06	6.43	11.80	1262.98	11.80	21.93	6314.88	21.93	23.56	574.08	23.56
CYREN Command	10.92	4.78	4.56	4.78	3.87	4.01	3.87	12.19	12.33	12.19	10.23	9.38	10.23
Defenx Security Suite	22.40	5.44	910.48	2.50	2.56	1114.52	2.66	6.74	1457.39	7.33	24.96	1722.55	11.69
Emsisoft Anti-Malware	50.53	14.45	12.33	14.45	12.38	13.07	12.38	48.21	48.45	48.21	30.51	31.06	30.51
eScan ISS Server Edn	31.24	41.39	65.03	41.39	6.25	19.53	6.25	18.96	60.72	18.96	18.20	81.66	18.20
ESET Endpoint	171.82	3.30	12.53	3.30	3.90	25.46	3.90	23.83	728.70	23.83	22.24	1262.98	22.24
ESTsoft ALYac 3	9.87	1.25	107.12	1.25	2.55	37.00	2.55	9.37	39.55	9.37	6.32	62.52	6.32
Fortinet FortiClient	7.88	5.00	5.55	5.00	2.05	2.90	2.05	10.93	13.85	10.93	10.32	11.32	10.32
G Data Antivirus	33.78	5.29	5.55	5.29	7.05	5.14	7.05	18.85	18.85	18.85	14.25	14.11	14.25
Ikarus anti.virus	13.71	1.68	5.03	1.68	1.19	3.56	1.19	13.97	36.43	13.97	8.23	23.27	8.23
iSheriff Security	26.15	30.35	30.35	30.35	6.08	6.14	6.08	15.36	16.52	15.36	11.69	12.60	11.69
K7 Internet Security	62.32	4.86	683.03	N/A	9.29	1184.11	9.29	18.30	1052.48	18.30	15.95	676.62	15.95
Kaspersky E.S. 10	11.85	1.84	2.32	1.84	10.06	631.49	10.06	21.48	653.31	21.48	8.65	728.70	8.65
Kaspersky S.O.S. 4	15.66	2.33	321.38	2.33	9.41	121.44	9.41	18.79	3157.44	18.79	8.33	394.68	8.33
Norman Security Portal	33.22	8.55	8.47	8.55	7.49	7.61	7.49	24.19	26.50	24.19	23.92	24.96	23.92
Panda Endpoint	7.83	0.88	1.00	0.88	2.92	7.33	2.92	10.60	10.89	10.60	7.59	7.50	7.59
PC Pitstop PC Matic	12.92	45.52	55.74	45.52	203.71	242.88	203.71	166.18	199.42	166.18	197.34	195.31	197.34
Quick Heal AV	10.12	1.31	1.61	1.05	4.31	7.91	3.65	9.58	9.96	9.81	9.07	9.55	8.23
Quick Heal Seqrite	10.79	1.27	1.38	1.04	4.43	5.72	5.02	11.24	11.30	11.12	10.51	13.49	9.50
Tencent PC Manager	17.98	3.84	3.35	3.84	5.68	6.05	5.68	11.83	12.59	11.83	7.55	8.71	7.55
ThreatTrack VIPRE	22.69	1.15	11.40	1.15	4.00	180.43	4.00	13.07	701.65	13.07	9.25	326.64	9.25
TrustPort Antivirus	6.46	3.38	2.55	3.38	2.40	2.58	2.40	9.52	9.78	9.52	5.81	5.57	5.81

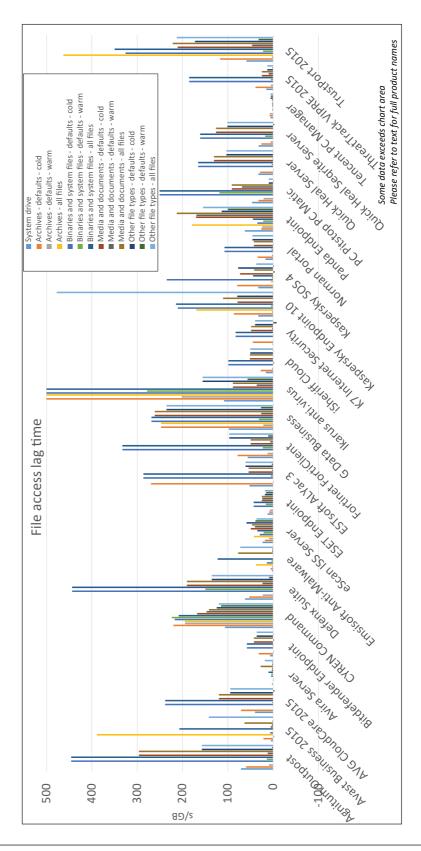
<sup>\*</sup>System drive size measured before product installation. (Please refer to text for full product names.)

OCTOBER 2015 Vb



File access lag time (s/GB)	System Archive files				Binarie	s and syst	em files	Media	and docu	iments	Other file types		
	drive*	Default (cold)	Default (warm)	All files	Default (cold)	Default (warm)	All files	Default (cold)	Default (warm)	All files	Default (cold)	Default (warm)	All files
Agnitum Outpost	70.94	59.62	9.13	NA	445.57	13.82	445.57	296.16	12.02	296.16	157.20	2.51	157.20
Avast Business Security	4.79	21.32	-2.49	388.76	6.75	-0.42	206.85	5.43	3.14	63.36	1.40	0.06	142.00
AVG CloudCare	40.00	70.90	-0.29	NA	238.25	2.16	238.25	119.80	0.01	119.80	94.67	-2.99	94.67
Avira Server Security	2.48	-0.22	-1.35	-0.88	4.52	3.94	10.23	3.11	2.26	27.61	1.73	1.59	18.39
Bitdefender E.S.	6.93	31.66	-1.56	NA	58.00	1.31	58.00	42.42	-1.92	42.42	36.37	-0.96	36.37
CYREN Command	106.32	220.23	194.40	195.08	217.25	223.45	208.41	167.72	146.97	141.65	124.57	114.93	119.85
Defenx Security Suite	62.00	52.66	23.06	NA	443.53	149.50	443.53	190.37	23.53	190.37	135.46	8.97	135.46
Emsisoft Anti-Malware	2.94	5.46	2.65	38.08	13.84	3.65	122.57	0.80	-0.29	77.30	1.93	1.70	72.69
eScan ISS Server Edn	23.48	18.29	9.04	42.84	29.49	21.13	34.93	49.26	40.25	46.60	58.66	39.03	36.64
ESET Endpoint	12.33	8.87	7.16	NA	42.96	16.02	42.96	24.80	24.00	24.80	18.40	15.63	18.40
ESTsoft ALYac 3	52.30	269.72	-1.28	NA	286.30	5.17	286.30	54.25	2.35	54.25	60.98	2.98	60.98
Fortinet FortiClient	56.27	78.61	12.39	NA	332.56	22.99	332.56	49.72	6.57	49.72	96.90	10.80	96.90
G Data Antivirus	97.54	247.43	21.61	247.43	268.56	31.35	268.56	261.20	26.31	261.20	235.44	26.73	235.44
Ikarus anti.virus	108.37	581.23	201.51	581.23	811.63	278.23	811.63	88.75	36.34	88.75	155.65	56.56	155.65
iSheriff Security	16.19	27.40	2.63	NA	98.77	-2.81	98.77	51.27	-0.44	51.27	50.50	-0.72	50.50
K7 Internet Security	1.54	44.99	-0.53	NA	82.87	-0.70	82.87	48.62	2.40	48.62	39.93	-7.61	39.93
Kaspersky E.S. 10	32.90	86.58	2.60	169.47	210.33	4.85	214.40	78.61	-0.36	110.41	79.26	1.13	477.53
Kaspersky S.O.S. 4	33.06	79.36	0.39	4.90	234.86	3.09	44.42	73.08	-3.33	41.97	77.11	-1.72	37.32
Norman Security Portal	16.91	34.22	2.81	NA	107.31	3.59	107.31	42.58	-0.81	42.58	45.72	0.59	45.72
Panda Endpoint	62.38	26.07	24.45	179.05	34.91	21.89	44.62	170.09	169.28	212.72	113.49	100.06	154.72
PC Pitstop PC Matic	46.53	32.35	21.09	NA	250.46	118.63	250.46	91.28	68.84	91.28	9.69	-0.90	9.69
Quick Heal AV	32.56	28.83	-0.90	NA	165.44	3.21	165.44	130.61	1.25	130.61	103.04	0.61	103.04
Quick Heal Seqrite	31.94	26.03	6.02	NA	161.05	17.55	161.05	126.07	-0.39	126.07	100.85	-2.67	100.85
Tencent PC Manager	5.76	7.65	7.37	NA	1.86	1.27	1.86	2.48	1.29	2.48	5.61	5.00	5.61
ThreatTrack VIPRE	15.12	38.91	5.27	NA	185.24	5.13	185.24	24.84	9.78	24.84	12.87	1.43	12.87
TrustPort Antivirus	58.81	116.86	3.10	462.89	325.75	22.36	349.81	210.74	46.46	221.55	172.46	32.14	212.80

<sup>\*</sup>System drive size measured before product installation. (Please refer to text for full product names.)



Reactive and Proactive (RAP) tests	VB100	Rea	ctive	Proa	ctive	Reactive	Proactive	Weighted
Reactive and Froactive (RAF) tests	VB100	Set -2*	Set -1*	Set +1 <sup>†</sup>	Set +2 <sup>†</sup>	average	average	average <sup>‡</sup>
Agnitum Outpost Security Suite Pro	VIRUS 100	79.73%	74.36%	68.14%	53.29%	77.05%	60.71%	71.60%
Avast Business Security 2015	VIRUS 100	97.89%	97.01%	84.57%	80.22%	97.45%	82.39%	92.43%
AVG CloudCare AntiVirus 2015	VIRUS 100	96.46%	97.22%	81.98%	76.20%	96.84%	79.09%	90.92%
Avira Server Security	VIRUS 100	97.93%	97.99%	84.65%	78.24%	97.96%	81.44%	92.46%
Bitdefender Endpoint Security	VIRUS 100	96.93%	96.99%	89.25%	84.74%	96.96%	86.99%	93.64%
CYREN Command Anti-Malware	X	97.97%	98.01%	81.71%	72.62%	97.99%	77.16%	91.05%
Defenx Security Suite	VIRUS 100	85.10%	74.83%	68.14%	53.29%	79.96%	60.71%	73.55%
Emsisoft Anti-Malware	VIRUS 100	96.14%	96.76%	88.95%	82.33%	96.45%	85.64%	92.85%
eScan ISS Server Edition	VIRUS 100	97.56%	96.94%	78.43%	78.90%	97.25%	78.67%	91.06%
ESET Endpoint Antivirus	VIRUS 100	92.91%	95.57%	88.61%	83.27%	94.24%	85.94%	91.47%
ESTsoft ALYac 3	VIRUS 100	96.94%	96.88%	89.25%	84.77%	96.91%	87.01%	93.61%
Fortinet FortiClient	VIRUS	96.49%	97.35%	82.39%	76.34%	96.92%	79.37%	91.07%
G Data Antivirus Business	VIRUS 100	98.42%	98.63%	90.12%	86.69%	98.53%	88.40%	95.15%
Ikarus anti.virus	VIRUS 100	96.96%	96.44%	87.38%	79.22%	96.70%	83.30%	92.23%
iSheriff Security From the Cloud	X	91.52%	91.19%	88.46%	83.42%	91.35%	85.94%	89.55%
K7 Internet Security	VIRUS 100	92.72%	87.60%	75.25%	63.01%	90.16%	69.13%	83.15%
Norman Security Portal	VIRUS 100	97.01%	97.00%	89.19%	84.70%	97.01%	86.95%	93.65%
Panda Endpoint Protection	VIRUS	85.22%	84.95%	66.25%	52.39%	85.09%	59.32%	76.50%
PC Pitstop PC Matic Home Security	X	92.78%	92.88%	89.12%	83.83%	92.83%	86.47%	90.71%
Quick Heal AntiVirus Server Edition	VIRUS 100	68.70%	64.31%	72.40%	55.51%	66.51%	63.96%	65.66%
Quick Heal Seqrite Antivirus Server Edition	VIRUS	64.18%	64.81%	72.28%	55.51%	64.50%	63.90%	64.30%
Tencent PC Manager	VIRUS	98.10%	98.29%	84.64%	78.27%	98.20%	81.45%	92.61%
ThreatTrack VIPRE Internet Security 2015	VIRUS	98.02%	98.10%	79.33%	69.90%	98.06%	74.62%	90.25%
TrustPort Antivirus 2015	VIRUS	99.09%	99.17%	91.20%	87.97%	99.13%	89.59%	95.95%

<sup>\*</sup>Set -1 = Samples discovered 1 to 5 days before testing; Set -2 = Samples discovered 6 to 10 days before testing.

 $<sup>^{\</sup>dagger}$ Set +1 = Samples discovered 1 to 5 days after updates frozen; Set +2 = Samples discovered 6 to 10 days after updates frozen.

<sup>\*</sup>Weighted average gives equal emphasis to the two reactive weeks and the whole proactive part.

