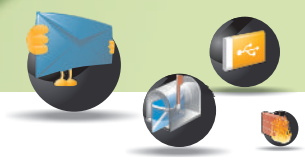
COMPARISON

eScan Internet Security Suite for SOHO
vs
ESET Smart Security



eScan Internet Security Suite v11 VS ESET Smart Security v4

Why do we need Internet Security?

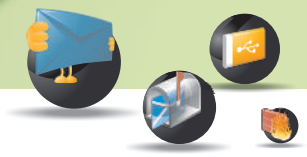
In this day and age data theft is by far a major concern – be it for organizations or even individuals. Now the question that needs to be answered here is, 'What do we understand by data theft?', 'Is it limited to organizations or does it trickle down to end users/consumers too?'. The answer is simple – data that is of importance to you is also mighty important to snoopers. It could be your school/college project or even specific files and folders. However for organizations, securing every bit is done on a much larger scale. Here it could be anything from financial accounts to intricate details of customers/employees. This is where endpoint protection plays a vital role.

But what do we mean by '**Endpoint Protection**'? In computing terms, Endpoint basically refers to ports to which USB and FireWire based devices connect. Therefore, having these ports left open is a concern as there are high chances of data theft. At eScan we understand the needs of not only our enterprise users but also end users who require protection not only from Malware but also from data theft. Not only can users lock down all endpoints but it also prevents malicious programs from executing as and when a pendrive is inserted.

Moreover with a large number of people logging into Networking Websites, malware writers are beginning to target sites such as Facebook, Twitter, Orkut (to name a few). For instance, 'My 1st St@tus' scam affected thousands of users on Facebook. However such applications don't just get added to your profile but are generally granted access by the user himself. Once allowed, the application can not only acquire profile details but can also post messages on your behalf. It not only ends there, the application then spreads across the network through all who are linked to your profile. While this particular application doesn't infect the PC there are many other who direct you to malicious websites that could be home to Trojans and various other malware. To prevent such rogue instances from taking place eScan comes built with a URL filtering module that prevents web pages from getting redirected to malicious websites or URLs.

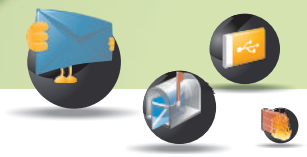
In addition to this, personal information can include anything from debit/credit card details, passwords for your personal accounts, bank details etc. To help protect your digital identity eScan ISS provides a much needed secure environment in comparison to other Security Suites. This would include certification levels reached by well known testing bodies such as AV-Comparatives, VirusBulletin and ICSA Labs. However another aspect that also needs to be taken into consideration is the number of false positives detected by the application. Therefore, just having a higher detection rate is never enough but being able to differentiate between malware (known/unknown) and genuine OS files is of utmost importance.

The first half of this document provides a brief explanation of the features that are overlooked by our competitor but are made available in eScan ISS v11. The second half displays the effectiveness of the protection offered by both security companies – eScan and ESET.



'e Scan Anti-Virus

Product Name	eScan Internet Security Suite v11	ESET Smart Security 4
Manufacturer/Developer	MicroWorld	ESET
VB 100% Certified	✓	✓
Unique Technology	MicroWorld Winsock Layer	SysInspector
Proactive Security	✓	✓
Real-Time AV Scanning	✓	✓
Spyware, KeyLogger, Rootkit Blocker	✓	✓
Real-Time File Monitor	✓ (Intelligent and Faster)	✓
On-Demand Scan	✓ (with Cache Technology)	✓
Anti-Spam	✓ (NILP, RBL, SURBL)	✓
Firewall (Inbound & Outbound)	✓	✓
Parental Control	✓	x
Malware URL Filter	✓	x
Anti – Phishing	✓	✓
Privacy Protection	✓	x
Application Control	✓	x
Endpoint Security	✓	x
History/ Reports	✓	✓
Web based Help	✓	x
Files and Folders Protection	✓	x
Asset Management	✓	x
Network Monitoring tool	✓	x
Update rollback	✓	Not Documented
Hotfix Rollback	✓	Not Documented
Auto download / update software version	✓	Not Documented
Auto Backup / Restore	✓	x
Remote Support Application	✓	x
Virtual Keyboard	✓	x
Entertainment/Gaming /Silent mode	✓	✓
Creating/Burning Bootable Rescue Disk	✓ Windows Based	✓ Linux Based
Automatic Patching of Windows® Operating System Vulnerabilities	✓	x
Laptop/Battery /Power saving mode for schedule scan	✓	x
Advanced Self-Protection Feature	✓	✓
Real-Time email Scan	✓	✓
Password protection	✓	✓
Heuristic Scanning	✓	✓
Registration/Activation:(via Web/SMS/eMail/FAX)	✓	✓
Grid-based Web Access/Timing	✓	x



'e Scan
Anti-Virus

Application Control

Another aspect of Endpoint Security is the Application Control feature. This added feature allows you to block applications from running on your PC. It includes pre-defined computer games, instant messengers, video/music players and P2P applications. In addition to this users can also add applications that need blocking.

Web Based Help

An aspect that is also well taken care of is the eScan Wiki which is just a click away on our home page. The eScan Wiki is a comprehensive coverage of all our products. Here users can find product related information, tips as well solution based content that help resolve specific product related issues.

Network Monitoring Tool

In addition to the Firewall, eScan Anti-Virus also features a network monitoring tool that provides a detailed overview of the applications connected to the Internet. Generation of reports is also made available that gives you a detailed summary of the overall data transferred either monthly or weekly. In addition to this, users can also view the top ten applications for the day or you could simply specify the dates that need to be looked into.

Update/Hotfix Rollback

At the start of every update eScan v11 makes a backup of the current database. So if the event the application downloads an update/hotfix that's corrupt it automatically rolls back to its previous stable database. However to keep user interactivity at its bare minimum the roll back process has been automated and doesn't require the user to intervene.

Auto download/update of Product

There are a few security companies that don't include product patches or fixes within their updates. Therefore as a user you will need to manually download and install the required patch or fix. This sort of method is actually a concern as most users have the tendency to overlook or even disable such notifications – leaving your security product unpatched and vulnerable to security threats.

We at MicroWorld understand the importance of product patches. We therefore include them in the hourly updates that we provided. So if there is a patch available on our server, the built-in updater for eScan downloads and installs the required patch/fix without the need of user interactivity.

Auto-backup/restore

The auto backup/restore feature of eScan is probably the most striking feature that our product has. The basic functionality of this is to create backups of critical files that correspond to the Windows OS. So in the event of an infection the auto backup and restore kicks in and restores critical OS related files that cannot be disinfected. This whole process is automated and requires no user intervention.

eScan Remote Support

Unlike our competitors eScan comes bundled with a special feature called eScan Remote Support. This module basically allows our support team to remotely connect and troubleshoot eScan related issues. The USP of this feature is that it allows most problems to be resolved remotely without having any support technician sent across. So as a user, you save a lot on time as the waiting period is almost negligible.

However, do keep in mind that this feature doesn't allow you – the user – to connect to our support department but will require you to call our support department and provide the Unique ID and Password that is generated. For security reasons the password is designed to change each time the eScan Remote Support is invoked.

Virtual Keyboard

User privacy is of our highest concern – reason why eScan 11 features a virtual keyboard. The implementation of a virtual keyboard allows users to enter confidential information such as banking passwords, credit/debit card details without any fear of your online identity being stolen. So even if your system is compromised by an unknown keylogger/spyware, the username and password that is entered during login remains protected.

Automatic Installation of Windows Critical Security Patches

A salient feature that our product implements is the vulnerability patching of the Windows Operating System. OS Vulnerabilities are the first cause of concern as most hackers scan for loopholes that allow them to bypass already implemented security settings. The implementation of OS patching in eScan v11 allows the application to directly connect to Microsoft's website and download only critical security patches for the Windows OS. This whole process is automated and doesn't require user intervention. So as a user you can be rest assured that your OS stays patched and secured from critical Windows related security vulnerabilities.

Malware URL Filter

With social networking on the rise, malware writers are using sites such as Facebook and Twitter as a platform to infect PCs via malicious websites/URLs. To help prevent this, eScan 11 features a malware URL filter that prevents access to infected sites.

Restore Windows Default Settings

Users can eliminate modifications made to their desktop and background settings in the event of a virus attack. This is made possible by accessing the Restore Windows Default Settings via the Tools menu. Once activated, eScan automatically performs a virus check and then sets the system variables to their default values.

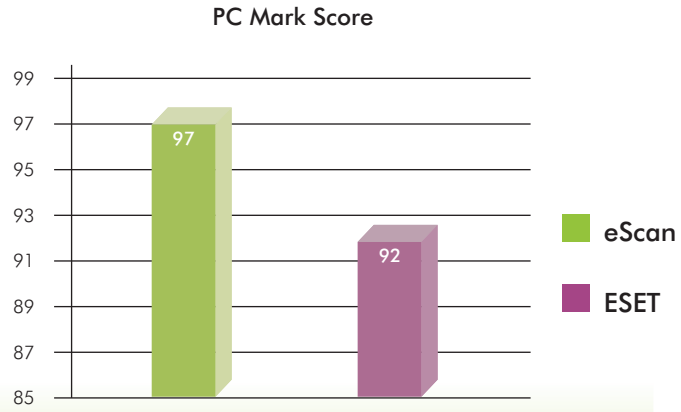
Grid-based Web Access/Timing

Apart from its Web Filtering/Parental Control module the program also allows you to define time restrictions. Here you can limit the number of hours that a particular user is allowed to access the web or you could simply block web access on certain days.

Performance Test

The tests were conducted by AV-Comparatives on an Intel Core 2 Duo E8300 PC with 2GB of RAM and SATAII hard disks. The performance tests were first carried on a clean Microsoft Windows 7 Professional (32-bit) system and then with the installed Anti-Virus software.

The chart shown below is a summarized score of various tests conducted by AV-Comparatives. Tests include file copying, archiving/unarchiving, encoding/transcoding, installing/uninstalling. In addition to this, tests that were also taken into consideration were file download speed and application launch speed. These tests basically give a brief overview of the affects on system performance by individual Anti-Virus products.

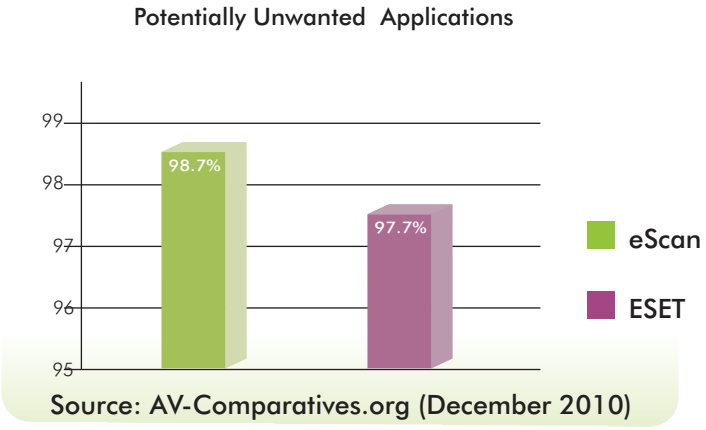


Source: AV-Comparatives.org (December 2010)

PUAs: Detection Rate

PUAs or Potentially Unwanted Applications can be directly linked to spyware, adware, dialers or even misleading applications. They can come across as legitimate programs repackaged and distributed via the Internet. So what you feel is legitimate in fact comes packed with a Trojan or Root Kit that bury themselves deep within the System, oblivious to the Virus scanner.

The following test shows the overall performance of the Virus scanner to detect PUAs and rogue software. The test set used by AV-Comparatives include a total of 82036 samples.

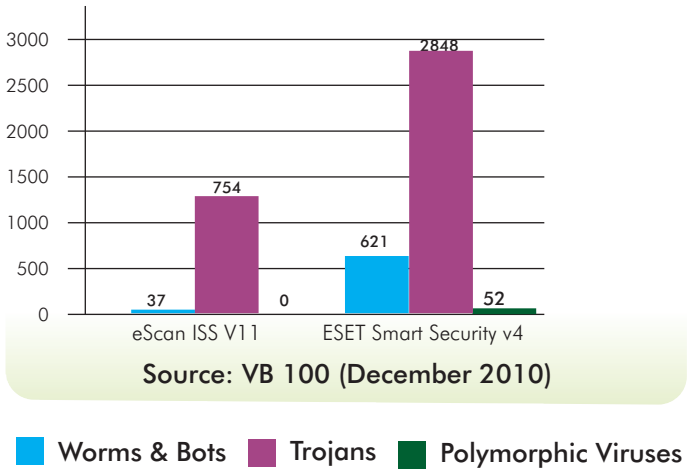


Source: AV-Comparatives.org (December 2010)

Missed Samples (On-Demand scan test)

The graph below is a representation of the number of virus samples overlooked by the Anti-Virus engine. The exact number of virus samples tested are unknown but are well over a few hundred thousand. So missing even 0.1% translates to almost over one thousand of malicious files skipped during the test.

As shown eScan has a relatively lower score of missed samples than that of our competitor – ESET. We haven't included WildList virus scores as both security suites scored a full 100% in detection and removal.

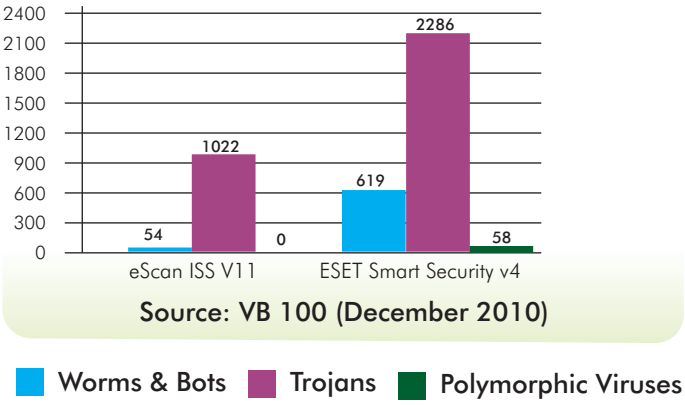


Source: VB 100 (December 2010)

Missed Samples (On-access test)

The on-access scan test defines the programs real time protection capabilities, which is probably the most important feature that an Anti-Virus should hone.

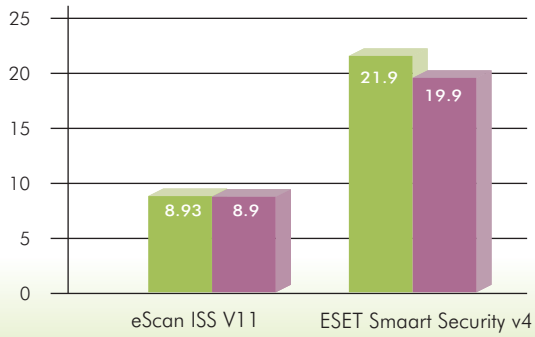
The following graph shows the number of virus samples missed by both eScan and ESET during the on-access test conducted by Virus Bulletin. Here again the graph speaks about the performance of both the products.



Source: VB 100 (December 2010)

Memory Load (%)

The load that an antivirus engine puts on a system is crucial as it defines the overall time taken for applications to respond. As most of us might have noted over the years that a high CPU usage by any scanner tend to slow down other processes that are in queue. Therefore limiting the number of CPU clicks (by the AV engine) is an important factor without compromising on the performance of the scanner. The chart below shows the percentage increase in Memory when Idle and during file access by eScan and ESET.

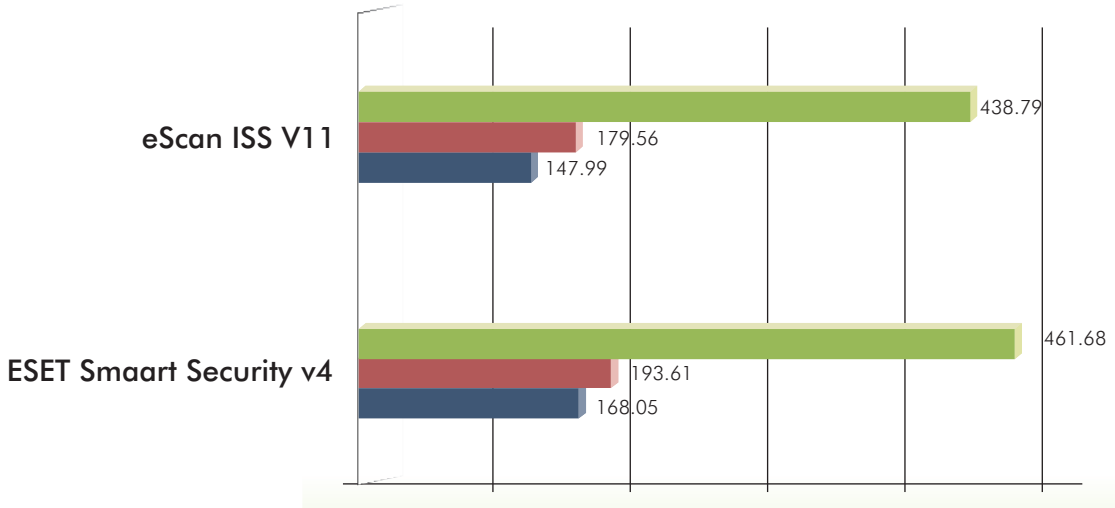


Source: VB100 (December 2010)

Idle Heavy file access

File copy and file compression (In seconds)

Installing an antivirus solution shouldn't slow down the overall performance of a system. In other words, it shouldn't be such that the response period of applications double or even triple with their installation. The chart below is a visual description of the time taken to compress and copy files (locally as well as from a network).



Source: AV-Test.org (December 2010)

File Decompression (Win RAR) File Copy (Network to Local PC) File Copy (Locally)