‘e Scan

COMPARISON

eScan Internet Security Suite for SOHO
VS
Panda Internet Security

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 Panda Security.

Product Name	eScan Internet Security Suite v11	Panda Internet Security 2011
Manufacturer/Developer	MicroWorld	Panda Security
VB 100% Certified	✓	✓
Unique Technology	MicroWorld Winsock Layer	Collective Intelligence
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	✓	✓
Malware URL Filter	✓	✗
Anti – Phishing	✓	✓
Privacy Protection	✓	✗
Application Control	✓	✗
Endpoint Security	✓	✓
History/ Reports	✓	✓
Web based Help	✓	✗
Asset Management	✓	✗
Network Monitoring tool	✓	✗
Update rollback	✓	Not Documented
Hotfix Rollback	✓	Not Documented
Auto download / update software version	✓	Not Documented
Auto Backup / Restore	✓	✓
Remote Support Application	✓	✓
Virtual Keyboard	✓	✓
Entertainment/Gaming /Silent mode	✓	✓
Files and Folders Protection	✓	✗
Creating/Burning Bootable Rescue Disk	✓ Windows Based	✓ Linux Based
Automatic Patching of Windows® Operating System Vulnerabilities	✓	✗
Laptop/Battery /Power saving mode for schedule scan	✓	✗
Advanced Self-Protection Feature	✓	✓
Real-Time email Scan	✓	✓
Password protection	✓	Not Documented
Heuristic Scanning	✓	✓
Registration/Activation:(via Web/SMS/eMail/FAX)	✓	✓ Not Documented
Grid-based Web Access/Timing	✓	✗

Privacy Control

This module has been implemented to help keep your data confidential and to minimize the amount of slack from accumulating over a period of time. However when we speak about confidentiality the module is built towards erasing browsing cache, history, cookies, plugins and various other forms of computing slack that gets left behind either during program installation or browsing the web. In addition to this, users can also add their own set of files and folders that need to be cleaned on a regular basis.

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 in 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

File and Folder Protection

We are all are paranoid about losing important data. However there are a number of ways in which data can be lost – the first would include corruption of files in the event of a virus attack, the second would be the deletion of a particular file or folder which could happen knowingly or unknowingly. To prevent data loss, eScan comes with a special feature called 'Folder Protection'. Once a folder is specified the module prevents any further modifications from being made. This safeguards important data from corruption in the event of an infection. In addition the module also prevents deletion and creation of files within specified folders.

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 11 allows the application to directly connect to Microsoft's website and download only critical hotfixes and updates for the 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.

Laptop Battery Power Saving Mode

eScan ISS v11 now features a built–in Battery mode wherein it prevents its own system intensive processes such as scheduled scan from running whenever the laptops power saver mode is detected – thereby increasing the overall runtime of the laptop. This feature is totally automated and requires no user intervention.

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.
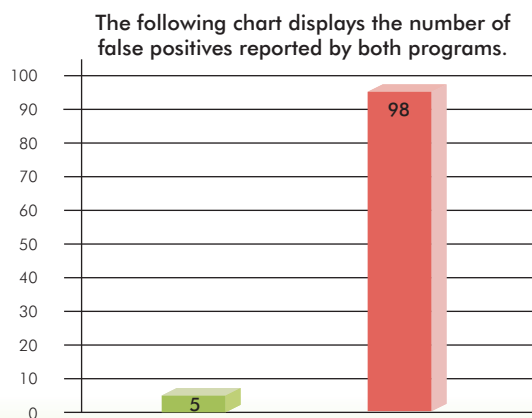
Grid-based Web Access/Timing

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.

False Positive measurement of AV product (On-Demand Scan)

AV-Comparatives is an Austrian Non-Profit-Organization, who provide independent Anti-Virus software tests free to the public. It is not only important to measure the products detection capabilities but the overall reliability of the product is of utmost importance. The goal of conducting a False Positive test is to help users differentiate between a good product from a far more superior product.

Before proceeding with the tests both programs were updated with the latest signatures. The test conducted show the total number of FP's detected by Panda Security with respect to eScan. An overwhelming 98 FP's were detected in comparison to just 5 FP's by eScan.

The following chart displays the number of false positives reported by both programs.

eScan ISS v11: 5
Panda IS 2011: 98

Source: AV-Comparatives.org (August 2010)

■ eScan ISS v11   ■ Panda IS 2011

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.

PC Mark Score

eScan ISS v11: 97
Panda IS 2011: 91
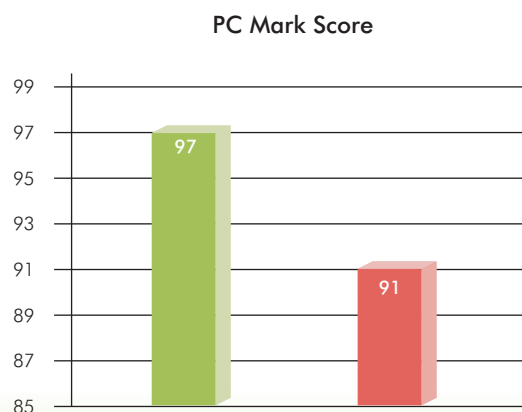
Source: AV-Comparatives.org (December 2010)

■ eScan ISS v11   ■ Panda IS 2011

Memory Usage (In MB)

The following tests were conducted by AV-Test GmbH that came into existence in the year 2004. With a test team consisting of 18 members and with each individual possessing over 15 years of experience in Anti-Virus research and Data Security, AV-Test is one of the leading test bodies that test the overall effectiveness, behavior and speed of security solutions.

The chart below displays the amount of memory consumed by both eScan as well as Panda Security. The Working Set displays the amount of memory (RAM) consumed under normal usage whereas the Private virtual memory is the amount of system cache consumed.
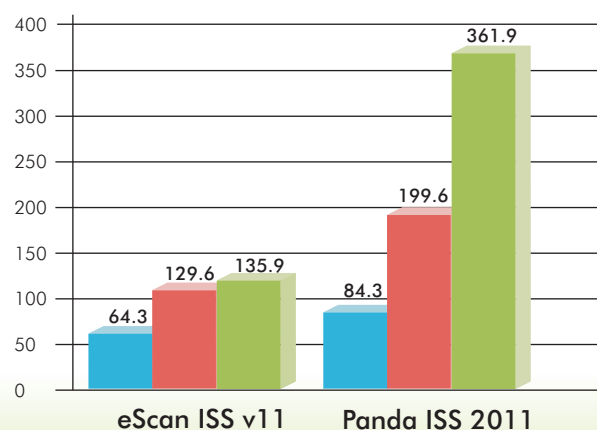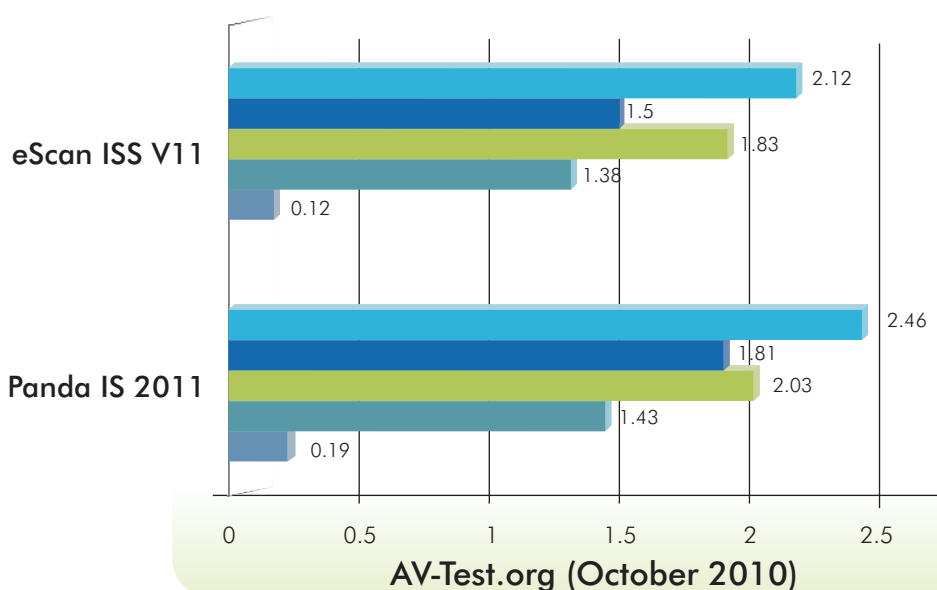

Source: AV-Test.org (October 2010)

■ Working Set ■ Private Virtual Memory

■ Private Virtual Memory2 (Peak)

File Access Time (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 overall time taken for applications such as MS Word and IE to respond. The tests were conducted on MS Word and Internet Explorer as they are the most commonly used applications.
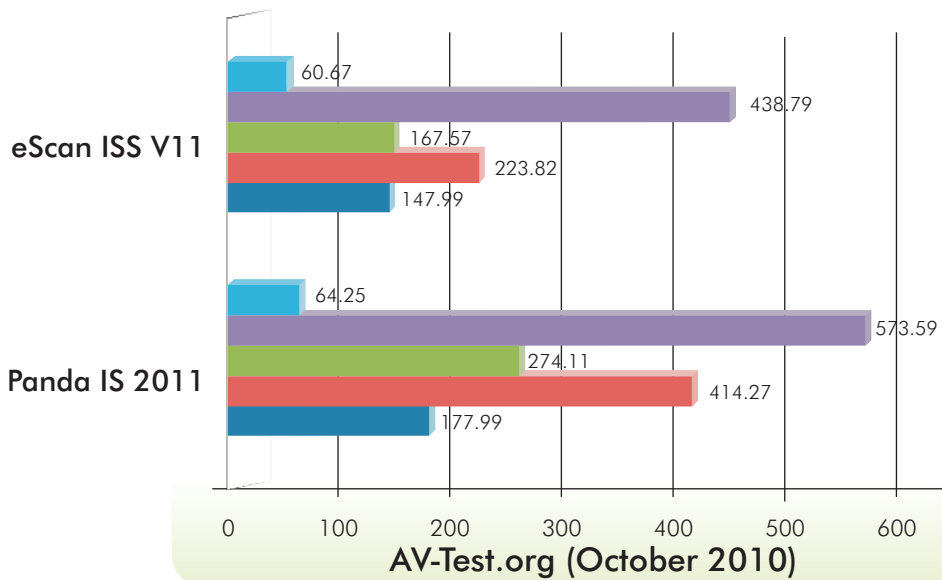

AV-Test.org (October 2010)

■ MS Word 2007 - File access time (Single)   ■ MS Word 2007 - Load Time

■ MS Word 2007 - File access time (Multiple)   ■ MS Word 2007 - Load Time (Multiple)

■ IE 8 Startup (Multiple)

File compression/decompression, creation and copy (In seconds)

The following tests were carried out to calculate the time taken to compress/decompress, create as well as copy a set of files locally. As displayed, eScan surpasses Panda by a fair margin.

eScan ISS V11
- 60.67
- 438.79
- 167.57
- 223.82
- 147.99

Panda IS 2011
- 64.25
- 573.59
- 274.11
- 414.27
- 177.99

0   100   200   300   400   500   600

AV-Test.org (October 2010)

- ■ File Copy (Local)
- ■ File Compression (Win RAR)
- ■ Create of file(*10000)
- ■ File Copy (*20000)
- ■ File Decompression (WinRAR)