

## Lab Testing Summary Report

February 2011

Report SRT110211

Product Category:

**Email Security Solution**

Vendor Tested:



Products Tested:

**InterScan Messaging Security Virtual Appliance**



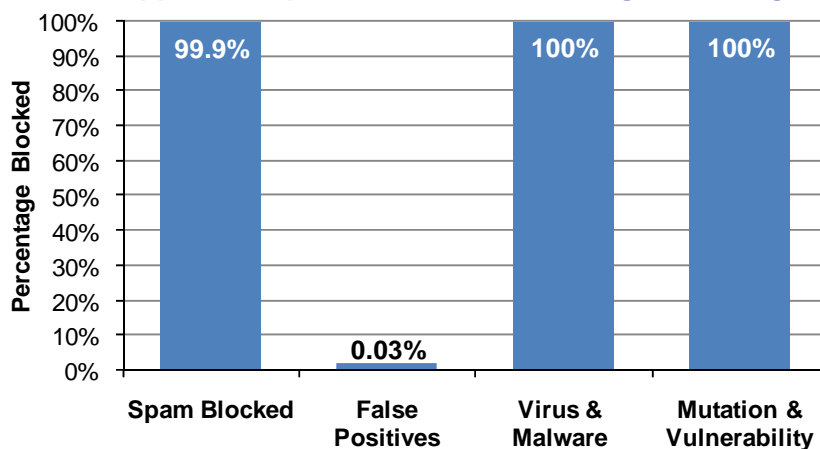
### Key findings and conclusions:

- **InterScan Messaging Security Virtual Appliance effectively blocked spam email at a rate of 99.9%**
- **A total of 10,000 emails with malware attachments were routed to attack the IMSVA. The appliance had a 100% block rate**
- **All mutations and vulnerability tests were 100% blocked**
- **Only 8 legitimate emails were quarantined as spam for a .03% false positive rate**

**T**rend Micro was recently tested by Miercom for the spam filtering capabilities of the InterScan Messaging Security Virtual Appliance (IMSVA). The IMSVA is a hybrid email security solution that integrates an on-premise virtual appliance with in-the-cloud SaaS email security. The appliance was subjected to a rigorous battery of vulnerability analyses and scans, as well as a complex set of exploits designed to break or defeat the security capabilities of the system.

We tested the InterScan Messaging Security Virtual Appliance without any additional hardware or software components which might enhance the performance of the appliance. The IMSVA was deployed using the default configuration recommended by Trend Micro. We found that in all mutation attack testing, all attack vectors were handled successfully and no faults were reported. The IMSVA stopped all mutated packets and there were no error messages. Vulnerabilities were not detected in the protocol implementation. See *Figure 1*. For more information on the attributes of the IMSVA, refer to the Miercom detailed lab report.

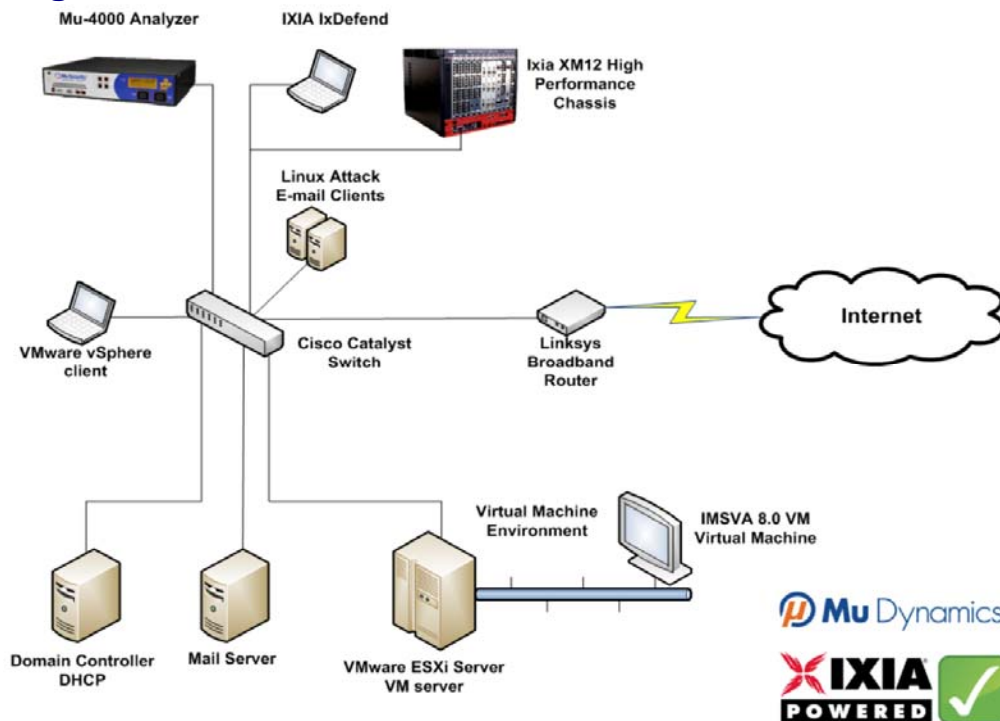
**Figure 1: Trend Micro InterScan Messaging Security Virtual Appliance Spam and Threat Blocking Percentages**



Source: Miercom, February 2011

*Trend Micro IMSVA blocked 99.9% spam, 100% of malware, had a near zero false positive count, and recorded no faults when attacked with various mutations.*

## Test Bed Diagram



## How We Did It

To test the anti-spam capabilities of InterScan Messaging Security Virtual Appliance v8.0 Miercom created a test bed consisting of a Domain Controller, a Mail Server and a server loaded with VMware ESXi 4.0. A virtual machine was created on the VMware ESXi server, where the Trend Micro IMSVA was installed. The virtual machine consisted of four processors, 4 GB of RAM and 200GB of hard drive space. The laptop with the VMware Vsphere Hypervisor client was used to access the management console of the Trend Micro virtual machine via a Cisco catalyst switch. This provided centralized management of the virtual machine that had been created on the VMware ESXi server. This in turn would allow for the management of Trend Micro IMSVA V8.0. The two physical servers containing the Domain Controller and the Microsoft Exchange Server 2007 were also connected to the catalyst switch. With the test bed configured the Miercom engineers proceeded to load IMSVA on the virtual machine. An ISO file provided by Trend Micro was downloaded and served as the boot file to turn on the virtual machine through the use of the vSphere client.

We used the Mu Test Suite ([www.mudynamics.com](http://www.mudynamics.com)) to perform security effectiveness assessments. The unit tests a UTM's ability to protect a network from threats with published signatures, even before endpoint patches to guard against them are applied. The Mu Test Suite PVA subscription distills information from the most recently discovered root-cause vulnerabilities into test cases that target the vulnerabilities that lie behind tens of thousands of unique exploit vectors.

Additional security assessments were conducted with Ixia's ([www.ixiacom.com](http://www.ixiacom.com)) IxDefend. It was used to generate exploits and attacks. Ixia's IxDefend is an advanced security assessment tool that can quickly find quality, resiliency, and security exposures across the broadest array of applications. It provides identification of known and zero-day threats in even the most hardened and complex protocol implementations. IxDefend tests over 40 protocols from link layer communications all the way up to application protocols. Each protocol in each bundle includes thousands of tests, each with its own detailed online documentation. IxDefend's tests provide the deepest possible protocol coverage.

The tests in this report are intended to be reproducible for customers who wish to recreate them with the appropriate test and measurement equipment. Miercom recommends customers conduct their own needs analysis and testing specifically for the expected environment for the product deployment before making a product selection. Contact [reviews@miercom.com](mailto:reviews@miercom.com) if you wish to receive assistance from Miercom professional services to conduct these tests.

## Miercom Performance Verified

Based on our assessment of email security products, the Trend Micro InterScan Messaging Security Virtual Appliance is awarded Performance Verified for its ability to detect and block spam, infected attachments, and various protocol mutation attacks.

Trend Micro IMSVA was challenged with proprietary malicious codes and vulnerability tests, spam filtering control group tests and spam filtering in the wild. The Trend appliance passed these tests and maintained the security of the network.

Developing a superior hybrid email security solution in the IMSVA, Trend Micro proves that it is a leader in providing Virtual Messaging Security and is setting the standards for the industry.



InterScan Messaging Security  
Virtual Appliance



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