

# Symantec Corporation

## Symantec Endpoint Protection 11.0 vs. McAfee Total Protection for Endpoint Performance Impact on Microsoft Office Usage



### Test Summary

*Premise: In today's threat-laden environment, complete client protection is paramount to maintaining productivity. It is also important to provide that endpoint protection while using a minimum of system resources and minimizing any impact on users. Long wait times caused by security program processing can reduce the productivity of system users and generally degrade their Quality of Experience. Symantec has made optimizing client performance a focus of its development efforts.*

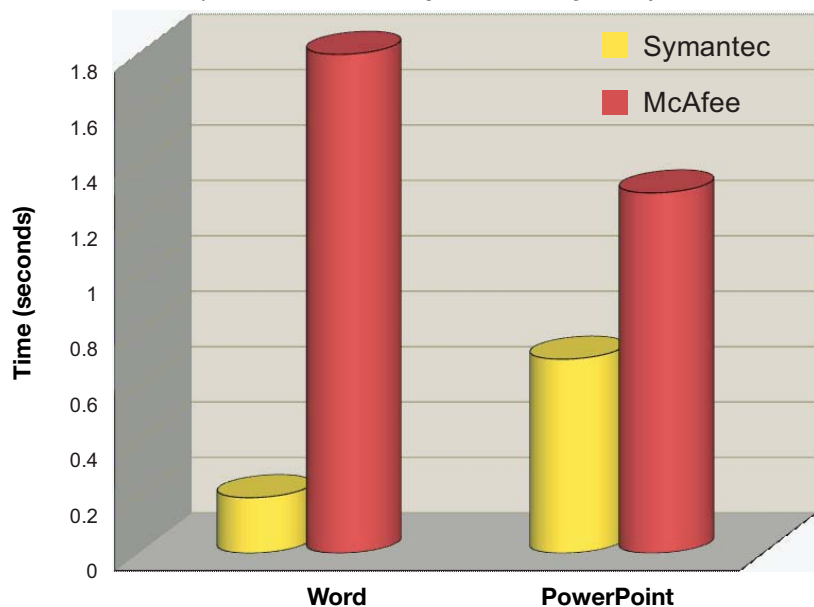
Symantec Corporation commissioned The Tolly Group to evaluate the impact of two Enterprise-class endpoint security offerings on host client performance: Symantec Endpoint Protection 11.0 compared with McAfee Total Protection for Endpoint. The Tolly Group installed Symantec Endpoint Protection 11.0 which provides anti-virus, anti-spyware and host intrusion prevention functionality in a single agent against the corresponding products in the McAfee Total Protection for Endpoint Bundle (See Figure 4).

The Tolly Group benchmarked file "open" and "save/close" times, as well as memory usage on an unprotected Microsoft Windows Vista SP1 system and compared these with execution times on the protected systems. Tests were conducted in July 2008.

### Test Highlights

- ▶ Symantec Endpoint Protection has a more positive impact on user productivity than the McAfee offering
- ▶ Symantec Endpoint Protection provides faster save/close time for key Microsoft Office documents, Word and PowerPoint than the McAfee offering
- ▶ Symantec Endpoint Protection consumes less overall memory than the McAfee offering when executing "save/close" functions for Microsoft Office documents

**Microsoft Office 2007/ Vista File "Open" Times  
(Increase Over Unprotected System)**



Source: The Tolly Group, July 2008

Figure 1

## Executive Summary

**Symantec's Endpoint Protection 11.0 provides faster processing for common functions such as opening and saving Word and PowerPoint files. This capability can improve the productivity and Quality of Experience for users.**

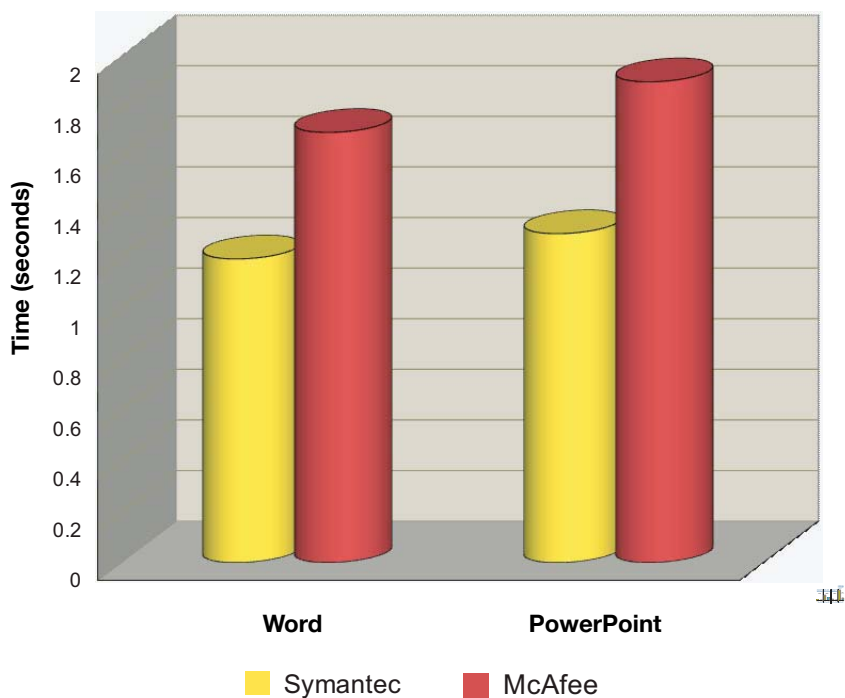
Endpoint Security solutions are designed to inspect and scan every file that is opened or written to the hard drive. The anti-virus engine scans the file and compares it to its repository of known viruses to ensure that no malicious content is embedded and that no harmful scripts are present in the file. This operation has a non-trivial impact on the performance of applications such as Microsoft Word and PowerPoint.

Symantec Endpoint Protection 11.0 consistently demonstrated faster "open" and "save/ close" times for Word and PowerPoint documents than McAfee Total Protection for Endpoint while using less overall memory.

Tolly Group engineers used a Microsoft Vista operating system with no protection client installed in order to gather benchmark data for certain file operations.

Engineers then tested these same operations on the baseline system with only the Symantec solution installed

**Microsoft Office 2007/Vista File "Save/Close" Times (Increase Over Unprotected System)**



Source: The Tolly Group, July 2008

Figure 2

### Summary of Test Results

Function	Baseline	Symantec	McAfee	% less impact than McAfee
	Elapsed time (seconds)/ Maximum memory (MB)			
MS Word	2.5	2.7	4.3	88.9%
5MB Open	36.0	26.7	40	333.3%
5MB Close	10.5	11.7	12.2	29%
	24.3	17.0	31.7	198%
MS Power-Point	3.8	4.5	5.1	46%
20MB Open	34.3	41.3	50.3	56.3%
20MB Close	9.4	10.7	11.3	31%
	39.0	42	51.7	76.4%

Source: The Tolly Group, July 2008

Figure 3

and then with only the McAfee solutions installed.

## RESULTS

### MICROSOFT OFFICE FILE “OPEN”

Tolly Group tests show that Microsoft Word was able to open a 5MB document in 2.7 seconds on a system with Symantec Endpoint Protection 11.0 installed, requiring only 0.20 seconds longer than the baseline system. On a system with McAfee Total Protection for Endpoint installed, the same operation took 4.2 seconds. Microsoft Word opened the file on the baseline OS in 2.5 seconds. (See Figures 1 and 3).

### MICROSOFT POWERPOINT

Testing also included measuring the time to open a 20MB Microsoft PowerPoint document. On the baseline system it took 3.8 seconds to open the 20MB presentation. Symantec added only 0.7 seconds to the operation. The system with McAfee installed took, 5.1 seconds to open the PowerPoint document, demonstrating that McAfee's impact was 48% higher than Symantec's. (See Figures 1 and 3).

### MICROSOFT OFFICE “SAVE/CLOSE TIME”

Tolly Group engineers measured the amount of time required to save and close a modified (i.e., using “Save as” to save an unmodified file under a new name.) 5MB word file. The system with the Symantec

client took only 1.2 seconds longer than the baseline system. The system with McAfee installed required 0.5 seconds longer than Symantec and 1.7 seconds longer than the baseline OS.

This same test was conducted for a 20MB Microsoft PowerPoint document. PowerPoint saved the presentation in 10.7 seconds on a system protected by Symantec, compared to 11.3 seconds on a system protected by McAfee. The McAfee products added 1.9 seconds to this operation.

## TEST SETUP & METHODOLOGY

Tolly Group engineers tested Symantec Endpoint Protection 11.0 MR3 and McAfee Total Protection for Endpoint. Note: McAfee assigns product numbers to individual products within the suite (See Figure 4).

As each solution is geared to the Enterprise user, each installation consisted of multiple security modules. The default set was installed, but only those that dealt with file access were exercised in this test.

All tests were conducted on the same client. Network connectivity was only required to “deliver” the endpoint software to the client under test.

The client machine ran Microsoft Vista Business (32-bit) SP1 on machine outfitted with an Intel Pentium D, 2.8-GHz processor, 1GB of RAM. The system was outfitted with a single Western Digital model WD800 drive which is an 80GB SATA hard drive. The client was a “clean” system without any viruses or malware placed on it.

Symantec Corporation

Endpoint Protection 11.0



Performance Impact of Enterprise Endpoint Security on Windows Vista

## Product Specifications

*Vendor-supplied information not necessarily verified by The Tolly Group*

Symantec Endpoint Protection 11.0

### Benefits:

- ☺ Symantec Endpoint Protection combines Symantec AntiVirus with advanced threat prevention to deliver unmatched defense against malware for laptops, desktops and servers. It seamlessly integrates essential security technologies in a single agent and management console, increasing protection and helping lower total cost of ownership
- ☺ Improved end-user Quality-of-Experience through efficient use of system resources

### Features:

- ☺ Seamlessly integrates essential technologies such as antivirus, anti-spyware, firewall, intrusion prevention, device and application control
- ☺ Requires only a single agent that is managed by a single management console
- ☺ Provides unmatched endpoint protection from the market leader in endpoint security
- ☺ Enables instant NAC upgrade without additional software deployment for each endpoint
- ☺ Optimizes client footprint and resource utilization to fit all business environments

### Symantec Corporation

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Product Components	
Symantec Endpoint Protection	Version 11.0
McAfee Total Protection for Endpoint Suite	Virus Scan Enterprise 8.5 for Windows
	Host Intrusion Prevention 7.0 for Windows
	AntiSpyware Enterprise 8.5 for Windows
	Site Advisor Enterprise 1.5

Source: The Tolly Group, July 2008 Figure 4


The Tolly Group is a leading global provider of third-party validation services for vendors of IT products, components and services.



The company is based in Boca Raton, FL and can be reached by phone at (561) 391-5610, or via the Internet at:  
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 E-mail: [sales@tolly.com](mailto:sales@tolly.com)

**Fair Testing Charter™**  
 Interaction with Competitors

As the products are designed to be “user installable” without support, The Tolly Group did not deem it necessary to contact the competing vendor.



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