



AV-Test Endpoint Security Performance Comparison



McAfee commissioned AV-Test, a well-respected independent security testing organization to perform head to head testing of McAfee's VirusScan Enterprise v8.8 and Host Intrusion Prevention (HIPS) v8.0 against five of the main antimalware competitors in the market. AV-Test used their own methodology designed to simulate real end user activity, such as startup, download files, application startup, scanning, shutdown, etc. The results below show McAfee to have the least performance impact of any product.

McAfee VirusScan Enterprise is the defacto standard in enterprise anti-malware protection and with the new v8.8 release it gets even better. With dramatic improvements in scan and boot-time performance, VirusScan Enterprise v8.8, released on Jan. 20, 2011, provides organizations with best-in-class protection and performance.

Performance improvements were achieved in the following areas:

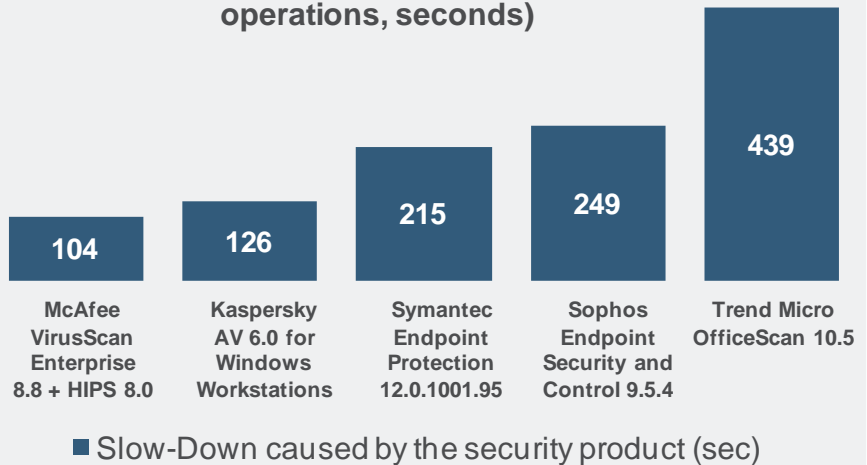
- File-caching performance
- On-demand scanning (ODS)
- On-access scanning (OAS)
- Memory consumption
- Registry scanning
- Battery life

Several innovations were implemented to achieve these results:

- Persistent file caching securely stores info about files already scanned so they don't need to be scanned again
- Multi-threaded implementation dramatically improves scanning time during:
 - On-access scanning
 - On-demand scanning

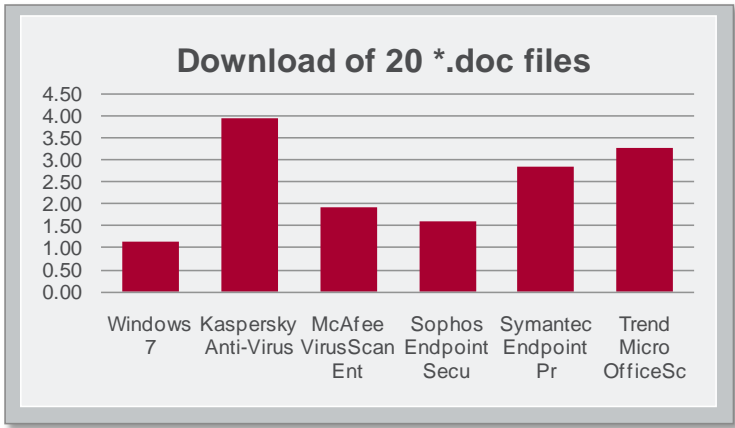
Performance Impact of Everyday Security Operations

(Cumulative effect of 20 separate consecutive operations, seconds)



Key end user benefit: Run more scans faster

- VirusScan Enterprise v8.8 shown to execute 8.3X more full machine scans in the same time as Symantec Endpoint Protection 12
- VirusScan Enterprise v8.8 On-Demand Scan shown to be 60% faster than Version 8.7 patch 1



At Left: On Access Performance Test, one of the 20 tests in the profile

Reduction in Memory Usage

- VirusScan Enterprise v8.8 consumes approximately 60 MB less memory when conducting On-Demand scans
- 45% improvement in memory usage when conducting a full On-Demand scans

Test Description:

Each anti-malware product was tested on Windows 7, using their most current editions with all automatic patches and service packs installed. All products were tested with full (unlimited) internet access, so updates were downloaded and "in the cloud" servers could be queried.

At right are the twenty tests selected by AV-Test to simulate common user operations that are traditionally impacted by Anti Malware products.

Test system specifications

- Intel Xeon Quad Core X3360 2,83GHz 12MB FSB1333
- 4 GB DDR2 667-RAM Kingston (2x 2048 MB)
- 500 GB SATA II WD Raid Edition III 3,5"
- DVD-Brenner DVD±RW (+R Dual Layer)

Please direct any additional questions to your McAfee representative or visit mcafee.com

Here are the twenty unique tests that were run consecutively with the cumulative time to complete recorded for each vendor product

Startup/shutdown tests

- PC Cold Startup
- Shutdown

Network tests

- Download of 20 *.doc files
- Download of 20 *.exe files
- Download of 20 *.pdf files
- Download of 20 *.rar files
- Download of 20 *.zip files

Other tests

- Copy a set of files locally
- Compute MD5 sums for a set of files
- MS Word 2007 startup while loading a file (after booting)
- MS Word 2007 startup while loading a file (repeatedly)
- MS Word 2007 startup (after booting)
- MS Word 2007 startup (repeatedly)
- Copy MS Office 2007 installer from network to local PC
- Install MS Office 2007
- Open a folder containing 200 files (repeatedly)
- Compress a set of files with WinRAR
- Decompress a set of files with WinRAR
- Start MS Internet Explorer 8 (after booting)
- Start MS Internet Explorer 8 (repeatedly)