

System performance in common professional find/use/share scenarios in Microsoft Windows Vista – security anti-malware scenario

Intel Corporation (Intel) commissioned Principled Technologies (PT) to compare the performance on Microsoft Windows Vista of an Intel vPro technology based PC with that of three other platforms on a common business professional security scenario. We tested a scenario that involves data security, and other common office applications. We tested a scenario which Microsoft Word 2007 and Microsoft Windows Defender. We compared the performance of the following four platforms on this scenario:

- Intel vPro technology with Intel Core 2 Duo processor E6700 on an Intel 965 (DQ965GF) motherboard
- Intel Pentium D processor 930 on an Intel D945GTP motherboard
- Intel Pentium 4 processor 630 on an Intel D945GTP motherboard
- Intel Pentium 4 processor on an Intel D865GBF motherboard

Scenario: creating a PDF with Microsoft Word while a Windows Defender scan runs

Jenny Carlson, a quality assurance analyst in the science and math testing department at Acme Academics, had shut down her computer while she was off-site at one of the regional grading centers. When she turns her system on, it starts a Windows Defender scan that was scheduled by the IT department. She lets it run in the background while she catches up on her work. One of Jenny's supervisors has assigned her the task of developing a style guide for the manuals their department provides for their educational and testing software. Jenny is evaluating a sample manual she likes, the Microsoft Office 2003 installation guide. She plans to post her style guide on the company's intranet site once she finishes the document. The other documents accessible from that page are PDFs, so she must also post in PDF format. Jenny is concerned about the size of the PDF files she will end up posting, because her supervisor has strict rules about all files being reasonable sizes. Jenny opens the sample document in Word and converts it to a PDF from within Word to get an idea of how big her style guide is likely to be.

The Intel vPro technology-based PC with the Intel Core 2 Duo processor E6700 outperformed its competitors on creating a PDF with Microsoft Word while a Windows Defender scan runs primarily because of the faster processor and chipset. The improvement is likely due to the processor's larger L1 cache, faster memory access, and, of course, dual cores.

For more information on these tests and to see the full test report, visit:

www.principledtechnologies.com/clients/reports/Intel/vProVistaEmp.pdf

PERFORMANCE RESULTS (seconds)				TASKS	COMPARATIVE RATING			
Intel Pentium 4 processor 2.8 GHz on Intel D865GBF	Intel Pentium 4 processor 630 on Intel D945GTP	Intel Pentium D processor 930 on Intel D945GTP	Intel vPro with Core 2 Duo processor E6700 on Intel DQ965GF		Intel Pentium 4 processor 2.8 GHz on Intel D865GBF	Intel Pentium 4 processor 630 on Intel D945GTP	Intel Pentium D processor 930 on Intel D945GTP	Intel vPro with Core 2 Duo processor E6700 on Intel DQ965GF
18.28	8.30	6.34	5.50	Foreground: Creating a PDF with Word	1.00	2.20	2.88	3.32
39.00	25.00	21.00	18.00	Background: Windows Defender scan	1.00	1.56	1.86	2.17

KEY FINDINGS

- The Intel® vPro™ technology based PC with the Intel® Core™ 2 Duo processor E6700 yielded significant performance advantages for users on our business professional security anti-malware scenario.
- The Intel vPro technology-based PC with the Intel Core 2 Duo processor E6700 finished the foreground task 1.15 times faster than the Intel® Pentium® D processor 930-based PC.
- The Intel vPro technology based PC with the Intel Core™ 2 Duo processor E6700 also finished the foreground task 3.32 times faster than the Intel® Pentium® 4 processor 2.8GHz based PC with the Intel D865GBF motherboard.
- These performance improvements translate into multi-second time savings that would be significant to users.

