IBM delivers best price/performance result ever published on TPC-E benchmark

IBM® System x® 3690 X5 achieves world-record two-processor performance on TPC-E

May 27, 2011 ... IBM has published a two-processor result on the TPC-E benchmark, demonstrating the leadership performance possible with the combined power of IBM's exclusive eX5, the fifth-generation X-Architecture®, and the Intel® Xeon® E7-2800 series processor technology.

The IBM System x3690 X5 server has set a new record for two-processor performance with 1,560.70 tpsE (transactions per second E). (1) The x3690 X5 has also raised the bar for price/performance with \$143.32 USD / tpsE—the overall best price/performance ever published for a TPC-E benchmark result—more than \$40 *less* per transaction than the next-best price per transaction. (2)

The x3690 X5 server's TPC-E performance and price/performance are leadership compared to the results achieved by the HP ProLiant DL380 G7 server. The x3690 X5's 1,560.70 tpsE beats—by 21%—the HP server's 1,284.14 tpsE. Even more impressive, the x3690 X5's \$143.32 USD / tpsE beats—by 42%—the HP server's \$250.00 USD / tpsE. (3)

The x3690 X5 achieved this tpsE result using Microsoft® SQL Server 2008 R2 Enterprise Edition and Microsoft Windows® Server 2008 R2 Enterprise Edition. The x3690 X5 server was configured with two Intel Xeon E7-2870 processors at 2.40GHz with 256KB L2 cache per core and 30MB shared L3 cache per processor (2 processors/20 cores/40 threads). The x3690 X5 system used solid state drive (SSD) storage helping to enable faster database access. (4)

The x3690 X5 server is a new generation of the IBM Enterprise X-Architecture®, delivering innovative technology that can help clients maximize memory, minimize cost, and simplify deployment. The x3690 X5 is a 2-socket, 2U rack server that supports the latest 6-, 8- and 10-core Intel Xeon processors, PCI-e architecture, and high-speed DDR3 memory. Designed for extremely complex, compute-intense applications requiring 2-socket processing power and large memory support, they are ideal for virtualized environments, database applications, and enterprise computing applications.

Results referenced are current as of May 27, 2011. To view all TPC results, visit www.tpc.org. See the details for this result: http://www.tpc.org/tpce/results/tpce_price_perf_results.asp

- (1) The total solution availability for this TPC-E benchmark result is May 27, 2011.
- (2) Fujitsu PRIMERGY RX300 S6 12x2.5 with two Intel Xeon X5690 processors at 3.46GHz (2 processors/12 cores/24 threads), Microsoft SQL Server 2008 R2 Enterprise Edition, Microsoft Windows Server 2008 R2 Enterprise Edition; 1,268.30 tpsE at \$183.94 USD / tpsE, total solution availability of March 1, 2011.
- (3) HP ProLiant DL380 G7 Server with two Intel Xeon X5690 processors at 3.46GHz (2 processors/12 cores/24 threads), Microsoft SQL Server 2008 R2 Enterprise Edition, Microsoft Windows Server 2008 R2 Enterprise Edition; 1,284.14 tpsE at \$250.00 USD / tpsE, total solution availability of May 4, 2011.
- (4) Solid state drive storage with LSI SAS enclosures and SMART Modular 200GB 2.5-inch SAS SSDs.

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