

IBM posts best 4-processor performance and lowest overall price/performance ever published on TPC-E benchmark

IBM System x3850 X5 achieves world-record 4-processor performance on TPC-E

June 27, 2011 ... IBM has published a benchmark result that sets new records for 4-socket performance and overall price/performance on the TPC-E benchmark—showcasing the ability of IBM's exclusive eX5, the fifth-generation X-Architecture®, and the new Intel® Xeon® E7 processor technology to deliver industry-leading performance results on System x® servers. The TPC-E benchmark is designed to enable clients to more objectively measure and compare the performance and price of various OLTP systems.

The IBM System x3850 X5 server achieved 2,862.61 tpsE (transactions per second E) at \$129.66 USD / tpsE. (1) The x3850 X5's performance is more than 16% faster than that of the HP ProLiant DL580 G7 Server. (2) Notably, the x3850 X5's price/performance, which is less than half that of the HP system, is also the lowest ever published for the TPC-E benchmark.

The x3850 X5 achieved this tpsE result using Microsoft® SQL Server 2008 R2 Enterprise Edition and Microsoft Windows® Server 2008 R2 Enterprise x64 Edition. The x3850 X5 was configured with four Intel Xeon E7-4870 processors at 2.40GHz with 30MB shared L3 cache per processor (4 processors/40 cores/80 threads), and 1024GB of memory. The x3850 X5 also was configured with solid state drive (SSD) storage helping to enable faster database access. (3)

The x3850 X5 server leverages fifth-generation IBM Enterprise X-Architecture®, delivering innovation with enhanced reliability and availability features to enable optimal performance for databases, enterprise applications, and virtualized environments. The x3850 X5 is a versatile 4-socket, 4U rack-optimized scalable enterprise server that supports up to 2TB of memory. In addition to higher levels of function than its predecessors, the x3850 X5 offers up to 8-socket (80-core) SMP operations with powerful 6-, 8- and 10-core Intel Xeon MP processors and up to 6TB of system memory in an 8-socket (80-core) complex with the optional IBM MAX5 for System x. The MAX5 is a scalable, 1U, memory expansion drawer that provides an additional 32 DIMM slots with a memory controller for added performance and a node controller for x3850 scalability.

Results referenced are current as of June 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 June 27, 2011.

(2) HP ProLiant DL580 G7 Server with four Intel Xeon E7-4870 processors at 2.40GHz (4 processors/40 cores/80 threads), Microsoft SQL Server 2008 R2 Enterprise Edition, Microsoft Windows Server 2008 R2 Enterprise Edition; 2,454.51 tpsE at \$291.00 USD / tpsE, total solution availability of June 20, 2011.

(3) Solid state drive storage with LSI enclosures and SMART Modular SSDs.

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