IBM posts best 4-processor performance on TPC-E benchmark

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

November 28, 2012 ... IBM has published a new benchmark result updating its record 4-socket performance on the TPC-E benchmark. This new result showcases the ability of IBM's exclusive eX5, the fifth-generation X-Architecture®, and the Intel® Xeon® E7 processor technology to continue 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 3,218.46 tpsE (transactions per second E) at $225.30 USD / tpsE. (1) The x3850 X5's performance is more than 21% faster than that of the Fujitsu PRIMERGY RX500 S7 (2) and over 31% faster than the HP ProLiant DL580 G7 Server. (3)

The x3850 X5 achieved this new level of OLTP performance using Microsoft® SQL Server 2012 Enterprise Edition and Microsoft Windows® Server 2012 Standard Edition. The x3850 X5 was configured with four Intel Xeon E7-4870 processors at 2.40 GHz with 30 MB shared L3 cache per processor (4 processors/40 cores/80 threads), and 2048 GB of memory.

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 2 TB 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 6 TB 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 November 28, 2012. To view all TPC results, visit www.tpc.org. See the details for this result: http://www.tpc.org/tpce/results/tpce_last_ten_results.asp

(1) The total solution availability for this TPC-E benchmark result is November 28, 2012.

(2) Fujitsu PRIMERGY RX500 S7 with four Intel Xeon E5-4650 processors at 2.70GHz (4 processors/32 cores/64 threads), Microsoft SQL Server 2012 Enterprise Edition, Microsoft Windows Server 2008 R2 Enterprise Edition; 2,651.27 tpsE at $161.95 USD / tpsE, total solution availability of November 1, 2012.

(3) 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.