

## **IBM publishes leadership 8-socket performance result on TPC-E benchmark**

*IBM® System x™ 3950 M2 delivers top 8-processor performance and scalability using Microsoft® SQL Server 2008 and Windows® Server 2008*

April 11, 2008 ... IBM has published the first 8-processor TPC-E benchmark performance result. The IBM System x 3950 M2 server achieved 804.00 tpsE (transactions per second E) at \$1,450.05 USD / tpsE. (1) The tpsE is the total number of trade-result transactions *per second* that the server can sustain over a period of time.

This new performance result demonstrates scalability from 4 to 8 processors of 67% based on the previously published result of 479.51 tpsE achieved by the x3850 M2. (2) This latest TPC-E result demonstrates the leadership performance and scalability that is possible with the combined power of IBM's exclusive fourth-generation X-Architecture®, Intel® Xeon® quad-core technology, the latest advances in Windows Server 2008 and SQL Server 2008, and the new Emulex 8Gb HBAs for IBM System x. (3)

Compared to Unisys's 16-processor tpsE and \$/tpsE results, the x3950 M2 server achieved 21% more transactions per second at 18% less price per transaction. (4)

The x3950 M2's 804.00 tpsE result was achieved using Microsoft SQL Server 2008 and Microsoft Windows Server 2008 Enterprise x64 Edition. The x3950 M2 server was configured with the Quad-Core Intel Xeon Processor X7350 at 2.93GHz with 2 x 4MB L2 cache per processor (8 processors/32 cores/32 threads). The x3950 M2 accessed the SQL Server database via the IBM System Storage™ DS4800 Fibre Channel storage subsystem.

The configured system also used the Emulex 8Gb Fibre Channel HBA for IBM System x, which supports MSI-X (Message Signaled Interrupts-eXtended). The MSI-X architecture, when paired with Microsoft Windows 2008 and MSI-X enabled storage drivers, can improve system performance by localizing interrupts and I/O processing.

The business model for TPC-E is that of a brokerage firm, for which the database schema, data population, transactions, and implementation rules have been designed to be broadly representative of modern OLTP systems. The TPC-E benchmark, launched by the Transaction Processing Performance Council in March 2007, is designed to enable clients to more objectively measure and compare performance and price of various OLTP systems.

Results referenced are current as of April 11, 2008. To view all TPC results, visit [www.tpc.org](http://www.tpc.org).

(1) IBM System x3950 M2 with the Quad-Core Intel Xeon Processor X7350 2.93GHz (8 processors/32 cores/32 threads), 804.00 tpsE, \$1,450.05 USD / tpsE, total solution availability of August 30, 2008.

(2) IBM System x3850 M2 with the Quad-Core Intel Xeon Processor X7350 2.93GHz (4 processors/16 cores/16 threads), 479.51 tpsE, \$1,591.20 USD / tpsE, total solution availability of August 30, 2008.

(3) The Emulex 8Gb FC HBAs for IBM System x will be orderable from IBM on July 8, 2008, and generally available July 15, 2008.

(4) Unisys ES7000/one Enterprise Server with Dual-Core Intel Xeon 3.4GHz Processor (16 processors/32 cores/64 threads), 660.85 tpsE, \$1,777.18 USD / tpsE, total solution availability of September 28, 2007.

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