IBM posts leadership 4-socket performance result on TPC-E benchmark

x3850 M2 delivers outstanding 4-processor performance on next-generation OLTP benchmark

October 23, 2007 ... IBM® has published a leadership 4-processor performance result on the TPC-E benchmark. The IBM System x[™] 3850 M2 server, leveraging IBM's exclusive fourthgeneration X-Architecture® and powered by the Quad-Core Intel® Xeon® Processor X7350, has delivered 419.80 tpsE (transactions per second E) at \$1,527.25 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.

The x3850 M2's 419.80 tpsE represents 90% more transactions per second when compared to the Dell PowerEdge 6850's 4-processor result of 220 tpsE. (2)

Compared to all previously published tpsE results achieved on dual-core Intel processor-based systems at various processor counts, the x3850 M2's tpsE is impressive:

System	Processor	Number of Processors	tpsE
IBM BladeCenter® HS21 XM (3)	Dual-Core Intel Xeon Processor 5160 (3.00GHz)	2	169.59
Dell PowerEdge 6850 (2)	Dual-Core Intel Xeon Processor 7140 (3.4GHz)	4	220.00
IBM System x3850 M2 (1)	Quad-Core Intel Xeon Processor X7350 (2.93GHz)	4	419.80
Unisys ES7000 (4)	Dual-Core Intel Xeon Processor 7140 (3.4GHz)	16	660.85

For this benchmark, the x3850 M2 server used the Quad-Core Intel Xeon Processor X7350 at 2.93GHz with 2 x 4MB L2 cache per processor (4 processors/16 cores/16 threads) and ran Microsoft® SQL Server 2005 Enterprise x64 Edition (SP2) and Microsoft Windows® Server 2003 R2 Enterprise x64 Edition (SP2). The x3850 M2 accessed the SQL Server database via the IBM System Storage™ DS4800 Fibre Channel storage subsystem.

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 October 23, 2007. To view all TPC results, visit www.tpc.org.

- (1) IBM System x3850 M2 with the Quad-Core Intel Xeon Processor X7350 2.93GHz (4 processors/16 cores/16 threads), 419.80 tpsE, \$1,527.25 USD / tpsE, total solution availability of December 7, 2007.
- (2) Dell PowerEdge 6850 with the Dual-Core Intel Xeon Processor 7140 at 3.4GHz (4 processors/8 cores/16 threads), 220.00 tpsE, \$1,020.13 USD / tpsE, availability of August 24, 2007.
- (3) IBM BladeCenter HS21 XM with Dual-Core Intel Xeon Processor 5160 3.00GHz (2 processors/4 cores/4 threads), 169.59 tpsE, \$1,897.66 USD / tpsE, total solution availability of August 10, 2007.

(4) Unisys ES7000/one Enterprise Server with the Dual-Core Intel Xeon Processor 7140 at 3.4GHz (16 processors/32 cores/64 threads), 660.85 tpsE, \$1,777 USD / tpsE, availability of Sept. 28, 2007.

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