IBM—first to break the barrier of 1 million transactions per minute on TPC-C benchmark—achieves industry milestone for x86-64 performance

IBM® System x™ 3950 M2—running DB2® 9.5 on Red Hat Linux® 5.2—sets world record for x86-64 performance by delivering more than 1.2 million tpmC

August 19, 2008 ... IBM has published the highest TPC-C performance result ever achieved by an x86-64 processor-based server. The IBM System x™ 3950 M2 server—using Intel's latest EM64T processor and running 64-bit IBM DB2 9.5 on Red Hat Linux® 5.2—has raised the bar for x86-64 performance on the industry-standard TPC-C benchmark.

The x3950 M2 and DB2 9.5 achieved 1,200,632 tpmC on the TPC-C online transaction processing benchmark. (1) This tpmC—the highest to date for a system using eight Intel® processors—shows a performance gain of more than 42% when compared to a similar configuration using the previous-generation Intel processor. (2)

For this benchmark, the x3950 M2 was configured with eight Intel Xeon® X7460 processors (2.66GHz with 9MB L2 cache and 16MB L3 cache per processor—8 processors/48 cores/48 threads), and ran DB2 9.5 (64-bit) and Red Hat Linux Advanced Server 5.2. The x3950 M2 accessed the DB2 9.5 database via the IBM System Storage™ DS3400 subsystem.

Engineered with the needs of enterprise organizations in mind, the IBM System x3950 M2 provides a scalable, efficient and highly reliable solution. Based on the innovative design in fourth-generation IBM X-Architecture®, the x3950 M2 enterprise server delivers unmatched x86 64-bit performance in a balanced design. To meet business demands, the x3950 M2 can scale from 8 to 16 processors to accommodate business growth.

DB2 9.5 delivers significant performance advantages with advanced threading, enhanced self-tuning memory manager, additional autonomics, deep compression, as well as many other features and scalability enhancements.

The entire IBM Systems product line is enabled to support Linux operating systems, so now any size business can take advantage of the power of open standards. This TPC-C performance result demonstrates that customers can implement Linux with IBM systems, software and/or services to deliver superior performance and scalability, as well as flexibility and lower total cost of ownership.

Combining IBM System x servers with Red Hat Enterprise Linux can help businesses realize innovation with an efficient, cost-effective enterprise-class solution.

The DS3400 Express model is designed and priced to enable businesses to consolidate and share data in a direct-attach or SAN solution that meets their needs for performance, data expansion, data availability and flexibility in a simple, affordable disk system.

Results referenced are current as of August 19, 2008. To view all TPC benchmark results, visit www.tpc.org.

(1) IBM System x3950 M2 with the Intel Xeon Processor X7460 2.66GHz (8 processors/48 cores/48 threads), 1,200,632 tpmC, $1.99 USD / tpmC, availability of December 10, 2008.

(2) IBM System x3950 M2 with the Quad-Core Intel Xeon Processor X7350 2.93GHz (8 processors/32 cores/32 threads), 841,809 tpmC, $3.46 USD / tpmC, availability of April 1, 2008.