IBM posts leadership performance results on industry-standard TPC benchmarks

March 2, 2004 ... IBM® continues to build on its reputation for leadership performance in the high-end Intel® server market. The IBM @server® xSeries® 445 and 365 servers (1), using the latest Intel Xeon[™] Processor MP, have delivered superior results on industry-standard TPC benchmarks:

- Best performance and price/performance for an 8-way server on the TPC-C online transaction processing benchmark
- Best performance for an 8-way server on the 300GB TPC-H business intelligence benchmark
- Best TPC-C performance for a 4-way Xeon processor-based server

xSeries 445 delivers best overall 8-way performance on TPC-C and 300GB TPC-H benchmarks

Setting a new record for 8-way performance on the TPC-C benchmark, the x445 achieved 156,105.72 tpmC at \$4.31/tpmC. (2) The x445 used eight Intel 3.0GHz Xeon Processor MP with 4MB L3 cache and ran Microsoft® SQL Server 2000 Enterprise Edition and Microsoft Windows® Server 2003 Datacenter Edition. This performance result demonstrates excellent processor performance scalability. Using eight 2.8GHz/2MB Intel Xeon MP processors, the x445 achieved 139,153.98 tpmC.

The x445 set a new record for 8-way performance running the 300GB TPC-H benchmark, which models a decision-support system for business intelligence applications. The x445 achieved a Composite Query-per-Hour metric of 6,551.8 QphH@300GB and price/performance of \$66/QphH@300GB. (2) The xSeries 445 was configured with eight 3.0GHz/4MB Xeon MP processors and ran DB2® Universal Database 8.1 and Microsoft Windows Server 2003 Enterprise Edition. These results rank in the Top Ten TPC-H by Performance and the Top Ten TPC-H by Price/Performance for the 300GB database.

xSeries 365 posts best TPC-C performance for a 4-way Xeon processor-based server

The x365 server has set a record for 4-way Xeon processor-based TPC-C performance. The x365 achieved 102,667.42 tpmC and price/performance of \$3.52/tpmC, with total solution availability of March 31, 2004. The server used four 3.0GHz Xeon MP processors with 4MB L3 cache and ran Microsoft SQL Server 2000 and Windows Server 2003 Enterprise Edition.

The x365 server outperforms a similarly configured 4-way HP ProLiant DL580-G2 by nearly 8 percent. (4)

Results referenced are current as of March 2, 2004. To view all TPC results, visit www.tpc.org.

(1) Planned availability for the x445 server is March 19, 2004. Planned availability for the x365 server is March 2, 2004.

(2) Total solution availability is August 31, 2004.

(3) x445 using eight Intel Xeon MP processors achieved \$5.07/tpmC with an availability date of December 31, 2003.

(4) HP ProLiant DL580-G2, 95,163.61 tpmC, \$2.93/tpmC, Availability Date March 2, 2004.

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The benchmark performance results for IBM systems as presented in this document were obtained in a rigorously controlled environment. The extent to which a customer can achieve similar results is highly dependent on how closely the benchmark approximates the customer's application. The relative performance of systems derived from this benchmark does not necessarily hold for other workloads or environments. Extrapolations to any other environment are not recommended.

Benchmark results are highly dependent upon workload, specific application requirements, and systems design and implementation. Relative system performance will vary as a result of these and other factors. Therefore, these benchmark results should not be for making critical capacity planning and/or product evaluation decisions for a specific customer application.

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