IBM sets world record with 32-processor, single-core performance for two-tier SAP SD Standard Application Benchmark

November 3, 2005 ... IBM® has published a world record with 32 processors/32 cores/64 threads for the two-tier SAP® Sales and Distribution (SD) Standard Application Benchmark, running the mySAP™ ERP 2004 solution. The result of 5,400 SAP SD Benchmark users was achieved by a complete IBM solution, comprised of the IBM eServer™ xSeries® 460 server, IBM DB2® Universal Database 8.2, and the IBM TotalStorage® DS4500 Disk Subsystem.

The x460 used 64-bit DB2 UDB and Microsoft® Windows® Server 2003 Datacenter x64 Edition to achieve 5,400 SAP SD Benchmark users with 1.93 seconds average dialog response time, measured throughput of 1,630,000 dialog steps per hour (or 543,330 fully processed order line items per hour), and an average CPU utilization of 89 percent. (1)

The x460 used the 64-bit Intel Xeon Processor MP at 3.33GHz with 8MB L3 cache (32 processors/32 cores/64 threads), 256GB of memory, DB2 UDB 8.2, Microsoft Windows Server 2003 Datacenter x64 Edition, and mySAP ERP 2004 (64-bit). The IBM TotalStorage DS4500 managed 101GB of Fibre Channel disk storage using loop-switch technology designed to enable Fibre Channel communication with each disk.

This new result for the x460 and DB2 surpasses the result achieved by the 32-processor NEC Express5800 Model 1320Xe in the two-tier SAP SD Standard Application Benchmark of 5,210 SAP SD Benchmark users. In the results posted by NEC, the configuration used the Intel Itanium2 processor at 1.6GHz with 9MB L3 cache (32 processors/32 cores/32 threads), running the SAP R/3® Enterprise solution Release 4.70, Microsoft SQL Server 2000, and Microsoft Windows Server 2003 Datacenter Edition. (2)

This result of 5,400 SAP SD Benchmark users represents a 68-percent increase in performance over the 3,200 SAP SD Benchmark users previously achieved by the x460 and DB2 in the two-tier SAP SD Standard Application Benchmark using the Intel Xeon Processor MP at 3.33GHz with 8MB L3 cache (16 processors/16 cores/32 threads), 128GB of memory, DB2 UDB 8.2, Microsoft Windows Server 2003 Datacenter x64 Edition, and SAP R/3 Enterprise 4.70 (64-bit). The IBM TotalStorage DS4500 managed 130GB of disk space accessed by the x460. (3)

Results referenced are current as of November 3, 2005.

For the latest SAP results, visit www.sap.com/benchmark. For information about DB2 visit www.ibm.com/db2. For TotalStorage, visit www.ibm.com/storage.

(1) This benchmark fully complies with the SAP Benchmark Council regulations and has been audited and certified by SAP AG (certification number 2005044). Details can be obtained from IBM and SAP. The benchmark was performed at Research Triangle Park, North Carolina, USA, by IBM engineers.

(2) Certification number 2005001.

(3) Certification number 2005028.

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