

## **IBM outperforms HP's 4-way Intel and AMD processor-based systems using Windows on two-tier SAP SD Standard Application Benchmark**

April 21, 2004 ... IBM® today announced a leadership 4-way, two-tier result on Windows for the IBM eServer® xSeries® 365 running IBM DB2® Universal Database on the two-tier SAP® Sales and Distribution (SD) Standard Application Benchmark, running SAP R/3® Enterprise Release 4.70. This result sets a world record for a 4-way, two-tier SAP SD Benchmark result on Windows—beating all other 4-way results obtained using Windows.

The x365 server achieved the best 4-way, two-tier SAP SD Benchmark result on Windows—outperforming similarly configured 4-way Intel® Itanium™ and Xeon™ processor-based SMP servers from HP, and their latest 4-way AMD® Opteron™ processor-based system.

The x365 used DB2 UDB and Microsoft® Windows® Server 2003 to achieve 720 SAP SD Benchmark users with 1.93 seconds average dialog response time, measured throughput of 217,000 dialog steps per hour (or 72,330 fully processed line items per hour), and an average CPU utilization of 98 percent for the central server. (1)

The x365's result surpasses results achieved by the HP Integrity rx4640 configured with four 1.5GHz Intel Itanium 2 processors, which scored 717 SAP SD Benchmark users; the HP ProLiant DL580-G2 configured with four 3.0GHz Intel Xeon MP processors, which scored 667 SAP SD Benchmark users; and the HP ProLiant DL585 configured with four 2.2GHz AMD Opteron 848 processors, which scored 712 SAP SD Benchmark users. (2)

The x365 used four Intel Xeon processors MP at 3.0GHz/4MB, 8GB of memory, DB2 UDB 8.1, Microsoft Windows Server 2003 Enterprise Edition, and SAP SD Standard Application Benchmark, R/3 Enterprise 4.70.

Results referenced are current as of April 21, 2004.

For the latest SAP results, visit [www.sap.com/benchmark](http://www.sap.com/benchmark). For information about DB2 visit [www.ibm.com/software](http://www.ibm.com/software).

(1) This benchmark fully complies with the SAP Benchmark Council regulations and has been audited and certified by SAP AG (certification number 2004019). Details can be obtained from IBM and SAP. The benchmark was performed at Research Triangle Park, North Carolina, USA, by IBM engineers.

(2) HP Integrity rx4640, 4-way SMP, Intel Itanium™ 2 1.5GHz with 6MB L3 cache, running SAP R/3 Enterprise Release 4.70, and Microsoft SQL Server 2000 and Microsoft Windows Server 2003 Enterprise Edition, certification 2004016. HP ProLiant DL580, 4-way SMP, Intel Xeon 3.0GHz with 4MB L3 cache, running SAP R/3 Enterprise Release 4.70, and Microsoft SQL Server 2000 and Microsoft Windows Server 2003 Enterprise Edition, certification 2004013. HP ProLiant DL585, 4-way SMP, AMD Opteron 848 2.2GHz with 1MB L2 cache, running SAP R/3 Enterprise Release 4.70, and Microsoft SQL Server 2000 and Microsoft Windows Server 2003 Enterprise Edition, certification 2004018.

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