IBM publishes world-record SPECjAppServer2004 Result on Linux

December 9, 2004 ... IBM® has published an industry-leading score of 1,343.47 JOPS@Standard for the SPECjAppServer2004 Standard benchmark. This world-record score was achieved on an IBM @server® xSeries® 365 cluster with IBM's latest WebSphere® middleware technology, IBM DB2® UDB and SUSE Linux.

The score of 1343.47 JOPS, together with previously published SPECjAppServer2004 results, demonstrates IBM's ongoing commitment to providing scalable J2EE-compliant middleware as part of a solution that exploits the strengths of its xSeries systems, IBM DB2 Universal Database, and IBM WebSphere® software.

The benchmarked configuration consisted of five xSeries 365 systems used as application server nodes. Each x365 used four Intel® Xeon™ MP 3.0GHz processors and ran WebSphere® 6.0 Application Server and SUSE Linux Enterprise Server 9. The x365 cluster used two x365 systems as database servers, each of which used four 3.0GHz Intel Xeon MP processors and ran IBM DB2 Universal Database 8.2 Enterprise Server and SUSE Linux Enterprise Server 9.

This SPECjAppServer2004 result was achieved on a configuration in which every component—from the workload driver to the Web server, application server, message server, and database server—ran on Linux.

The SPECjAppServer2004 benchmark reflects the rigors of complex applications and high-volume transaction processing that are typical in today's customer environments. The test spans all major components of the application server, including Web serving, Enterprise Java™ Beans and messaging, and includes hardware, application server software, Java Virtual Machine software, database software and a systems network.

IBM's submission involved more than 10,000 concurrent clients and produced more than 1,300 complex business transactions per second, which translates into more than 4.6 million transactions over the course of the benchmark's one-hour runtime. The IBM submission represents an IBM solution that brings together IBM eServer™ xSeries systems, middleware (WebSphere on Linux), and database (DB2 on Linux).

Click to see the diagram of the configuration used to achieve this result.

For all published SPECjAppServer2004 results, visit:
www.spec.org/jAppServer2004/results/jAppServer2004.html

Results referenced are current as of December 9, 2004.

(1) The following description is an excerpt from SPEC's April 2004 press release announcing SPECjAppServer2004: The Standard Performance Evaluation Corp. (SPEC) released SPECjAppServer2004, a new benchmark that measures the performance of Java 2 Enterprise Edition (J2EE) application servers. SPECjAppServer2004 is a completely new benchmark and not comparable to SPEC J2EE benchmarks released in late 2002. It includes a modified workload and features that stress more of the capabilities of J2EE 1.3 or later application servers. The intent of this benchmark is to provide a level playing field on which to test and compare the latest J2EE hardware and software platforms. Performance is measured in SPECjAppServer2004 by a metric called JOPS (jAppServer Operations Per Second). The metric is derived by adding the operations per second in the dealer domain to the work orders per second in the manufacturing domain.