xSeries 360 server sets the pace with high performance and scalability for running Java applications on an Intel processor-based server

September 5, 2002 ... The IBM @server xSeriesTM 360 has demonstrated leadership performance as a 2- and 4-way Intel® processor-based SMP server running SPECjbb2000, a benchmark designed to measure a server's scalability when running Java applications. Compared to other Intel processor-based 2- and 4-way results, the x360's scores are the highest achieved to date on SPECjbb2000. The x360 achieved 2- and 4-way results on both Microsoft® Windows® 2000 and Linux® platforms.

The x360's 4-way scores on Windows 2000 and Linux are well over 90 percent higher than Dell's 4-way score on the PowerEdge 6400 and even surpassed Dell's 8-way result on the PowerEdge 8450.

The scores for the x360 and representative competitors are summarized in the table.

| Server | Number of Processors | Operations/Second |
|---------------------|----------------------|-------------------|
| x360/Windows 2000 | 4 | 50,118 |
| x360/Windows 2000 | 2 | 26,540 |
| x360/Linux | 4 | 49,211 |
| x360/Linux | 2 | 26,205 |
| Dell PowerEdge 8450 | 8 | 47,039 |
| Dell PowerEdge 6400 | 4 | 25,626 |

The x360 used the Intel 1.6GHz/1MB XeonTM Processor MP in the 2- and 4-way configurations. On the Windows platform, the x360 ran IBM J2RE 1.3.1 IBM Windows 2000 Build cn131-20020227 (JIT enabled: jitc) and Windows 2000 Server. On the Linux platfrom, the x360 ran IBM J2RE 1.3.1 IBM Build cxia32131-2020302 (JIT enabled: jitc) and Red Hat Linux 7.2.

For complete configuration details for all systems, access the posted reports at www.spec.org.

About SPECjbb2000

The following description of this benchmark is quoted from the SPEC press release of June 5, 2000:

"The Standard Performance Evaluation Corp. (SPEC) has released SPECjbb2000, a new benchmark for evaluating the performance of servers running typical Java business applications. The benchmark can be used across several versions of UNIX, Windows/NT, Linux and other operating systems.

SPECjbb2000 represents an order processing application for a wholesale supplier. Written in Java, it was developed with participation from computer vendors, system integrators, universities, research organizations, publishers and consultants. Systems integrators and end users can use the benchmark to evaluate performance of hardware and software aspects of Java Virtual Machine (JVM) servers. Hardware vendors can use SPECjbb2000 to analyze their platform's scalability when running Java applications. Software vendors can use it to evaluate the efficiency of their JVMs, just-in-time compilers (JITs), garbage collectors, thread implementations, and operating systems.

SPECjbb2000 – the 'jbb' stands for Java business benchmark – is implemented as a Java program emulating a three-tier client/server system with emphasis on the middle tier. All three tiers are implemented within a single JVM. The tiers mimic a typical business application, where users in tier one generate inputs that result in the execution of business logic in the middle tier (tier two), which in turn calls to a database on the third tier. SPECjbb2000 does not depend on any package beyond the Java run-time environment (JRE)."

Results referenced are current as of September 5, 2002. The SPEC2000 results for the x360 are posted at www.spec.org.

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