

Performance Brief

xSeries 360 delivers high performance and scalability for running Java applications

September 2002

The IBM @server xSeries 360 is 4-way SMP server that incorporates the powerful Intel[®] XeonTM Processor at speeds of 1.4, 1.5 or 1.6 GHz. (1) Recent measurements were made using SPECjbb2000 to evaluate the x360's ability to run Java applications in both a Microsoft[®] Windows[®] 2000 and Red Hat Linux environment using 2- and 4-way configurations. The results demonstrate the excellent performance and scalability of which the x360 is capable. The results and configuration details are summarized in the table.

SPECjbb2000 (Java Business Benchmark) is SPEC's first benchmark for evaluating the performance of server-side Java. Joining the client-side SPECjvm98, SPECjbb2000 continues the SPEC tradition of giving Java users an objective and representative benchmark for measuring a system's ability to run Java applications.

SPECjbb2000 represents a middleware application written in Java. Hardware vendors can use the benchmark's results to analyze their platforms' scalability when running Java applications. Software vendors can evaluate the efficiency of their JVMs, JITs, garbage collectors and thread implementations.

| Operations per Second (op/s) Using Windows 2000 | | |
|--|--|--|
| 26,540 | 50,118 | |
| Two-Way | Four-Way | |
| Two 1.6GHz Xeon Processor MP with 1MB L3 Cache | Four 1.6GHz Xeon Processor MP with 1MB L3 Cache | |
| 4GB Memory | 4GB Memory | |
| One 36.4GB (2) 15K Ultra320 Disk Drive | One 36.4GB 15K Ultra320 Disk Drive | |
| JVM Version | | |
| J2RE 1.3.1 IBM Windows 32 Build cn131-20020227 (JIT enabled: jitc) | | |
| Operating System | | |
| Microsoft Windows 2000 Server | | |

| Operations per Second Using Red Hat Linux | | |
|--|--|--|
| 26,205 | 49,211 | |
| Two-Way | Four-Way | |
| Two 1.6GHz Xeon Processor MP with 1MB L3 Cache | Four 1.6GHz Xeon Processor MP with 1MB L3 Cache | |
| 2GB Memory | 2GB Memory | |
| Two 36.4GB 15K Ultra320 Disk Drives | Two 36.4GB 15K Ultra320 Disk Drive | |
| JVM | Version | |
| J2RE 1.3.1 IBM Windows 32 IBM Build cxia32131-20020302 (JIT enabled: jitc) | | |
| Operating System | | |
| Red Hat Linux 7.2 with 2.4.18-0.26 Kernel | | |

For a complete list of SPECjbb2000 results and complete information about the benchmark, visit <u>www.spec.org</u>.

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Published by the IBM xSeries Server Performance Laboratory, IBM Corp.

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Notes

(1) GHz only measures microprocessor internal clock speed, not application performance. Many factors affect application performance.

(2) When referring to hard disk capacity, GB, or gigabyte, means one thousand million bytes. Total user-accessible capacity may vary depending on operating environment.

Results referenced in this document are current as of September 5, 2002.