IBM delivers leadership performance for e-business and messaging applications

June 10, 2002 ... IBM® today expanded the award-winning @server xSeries product line with the announcement of new models featuring the Intel® Xeon™ Processor. These new systems achieved record performance on the popular benchmarks SPECweb99 (1) and Exchange 2000 MAPI Messaging Benchmark (2) and the lowest price/performance on the NotesBench iNotes workload. (3)

Outstanding performance for e-mail environments

Powered by Intel's new Xeon DP processors, the new x235 has handily beat Dell's throughput score on the Exchange 2000 MAPI Messaging Benchmark -- delivering the highest two-way server score to date. The x235 supported 8,200 MMB2 (users) -- 11 percent more than Dell's top-of-the-line two-way Intel-based server, the Dell PowerEdge 4600, which achieved 7,300 MMB2. (4)

IBM also introduced another Xeon-based server, the x255 -- a four-way tower system that has eclipsed every other four-way box in the industry scoring 11,200 MMB2. With this benchmark result, IBM has introduced the most powerful four-way business application server in the industry. (5)

Powerful performance for e-business computing demonstrated with SPECweb99

The xSeries 235 server set a new SPECweb99 performance record of 4,470 simultaneous connections using Microsoft® Windows® 2000 Advanced Server and Microsoft Scalable Web Cache 3.0. The xSeries 235 used two Intel Xeon Processor DP 2.2GHz/512KB processors and 8GB of memory. The new result is the best overall two-way score and surpasses Dell's score of 4,320 on a similarly configured system. (6)

Lowest price/performance for the NotesBench iNotes workload

A new model of the xSeries 360, announced today, achieved 6,750 iNotes users on the NotesBench benchmark at \$8.01/user, and 3,492 NotesMarks (transactions per minute) at \$15.48/NotesMark -- the lowest price/performance to date for the iNotes workload. The server used four 1.6GHz/1MB L3 Xeon Processor MP and 3GB of memory and ran Lotus Domino Server 5.0.9a and Microsoft Windows 2000 Advanced Server. (7)

- (1) SPECweb99 measures the maximum number of simultaneous connections, requesting the predefined benchmark workload that a Web server is able to support while still meeting specific throughput and error rate requirements.
- (2) The Exchange 2000 MAPI Messaging Benchmark is designed to measure the maximum messaging throughput of a Microsoft Exchange Server on a particular hardware configuration.
- (3) The iNotes Web Access workload executes Notes transactions that model a server for mail users who access their mail via the Web. The resulting capacity metric for a server is the maximum number of users that can be supported before the average user response time becomes unacceptable.
- (4) The xSeries 235 used two 2.4GHz/512KB Xeon Processor DP and 4GB of memory. The Dell PowerEdge 4600 used two 2.2GHz/512KB Xeon Processor DP and 4GB of memory.
- (5) The xSeries 255 used four 1.6GHz/1MB L3 Xeon Processor MP and 4GB of memory.
- (6) The Dell PowerEdge 4600 used two Xeon Processor DP 2.2GHz/512KB processors and 8GB of memory and ran Microsoft Windows 2000 Advanced Server and Microsoft Scalable Web Cache 3.0.

(7) The x360's 6,750 users at price/performance of \$8.01/user shows outstanding value when compared to Sun Microsystems' \$18.06/user with performance of 7,500 users, achieved on the Sunfire V880, which used eight 900MHz UltraSPARC-III processors and 32GB of memory and ran Solaris 8 and Domino Server 5.0.8 in four partitions.

For a complete results, visit http://www.microsoft.com/exchange/techinfo/planning/2000/perfscal.asp, http://www.notesbench.org

Specific information about IBM and xSeries products, services and support is located at **ibm.com**/pc/ww/eserver/xseries.

Results referenced are current as of June 10, 2002. The Exchange 2000 reports have been approved and will be posted on the Microsoft Web site between June 15 and 30 in accordance with their review cycle.

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