



Performance Brief

New xSeries 345 delivers powerful performance for Web-serving applications

February 2003

The IBM® @server xSeries™ 345 servers are high-throughput, two-way SMP-capable Xeon Processor-based servers. They deliver excellent scalability for adding memory, adapter cards, or multiple processors. They incorporate the powerful 2.67 or 2.8GHz¹ Intel® Xeon™ Processor with 512KB integrated full-speed ECC L2 cache.

The SPECweb99_SSL benchmark was used to measure the x345 server's performance in a configuration that used two 2.8GHz Xeon Processors. The SPECweb99_SSL² results and configuration details are summarized below.

SPECweb99_SSL - Simultaneous Connections
IBM @server xSeries 345
1,149
System Hardware
2 x 2.8GHz Xeon Processor with 512KB L2 Cache
4GB Memory
6 x 36.4GB 15K Ultra320 Disk Drives
Embedded LSI SCSI Controller
Operating System and HTTPS Software
Red Hat Linux 7.3
Zeus V4.2
Network Hardware
One Embedded Gigabit Controller
Extreme Networks Summit 7i Gigabit Switch

These results are current as of February 20, 2003. The SPECweb99_SSL results for the x345 server will complete SPEC review on March 4. Upon successful review, these results will be posted at www.spec.org. For a complete list of SPECweb99_SSL results, visit www.spec.org.

THE INFORMATION CONTAINED IN THIS DOCUMENT IS DISTRIBUTED ON AN AS IS BASIS WITHOUT ANY WARRANTY EITHER EXPRESS OR IMPLIED. The use of this information or the implementation of any of these techniques is the customer's responsibility and depends on the customer's ability to evaluate and integrate them into the customer's operational environment. While each item has been reviewed by IBM for accuracy in a specific situation, there is no guarantee that the same or similar results will be obtained elsewhere. Customers attempting to adapt these techniques to their own environment do so at their own risk.

This publication was produced in the United States. IBM may not offer the products, services, or features discussed in this document in other countries, and the information is subject to change without notice. Consult your local IBM representative for information on products and services available in your area.

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

© Copyright International Business Machines Corporation 2003. All rights reserved.

Permission is granted to reproduce this document in whole or in part, provided the copyright notice as printed above is set forth in full text at the beginning or end of each reproduced document or portion thereof.

Note to U.S. Government Users — Documentation related to restricted rights — Use, duplication or disclosure is subject to restrictions set forth in GSA ADP Schedule Contract with IBM Corp.

Trademarks

IBM, xSeries and the e-business log are trademarks or registered trademarks of International Business Machines Corporation. Intel and Xeon are trademarks or registered trademarks of Intel Corporation.

Linux is a registered trademark of Linus Torvalds.

SPECweb99 is a trademark of Standard Performance Evaluation Corporation.

Other company, product and service names may be the trademarks or service marks of others.

Notes

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

(2) SPECweb99_SSL, a new benchmark released in April 2002, adds Secure Sockets Layer (SSL) Protocol support to SPECweb99, the acknowledged worldwide standard for web server performance evaluation. It tests secure Web server performance using HTTP 1.0/1.1 over the SSL Protocol. It is an extension of, rather than a replacement for, SPECweb99. SPECweb99_SSL adopts an industry-accepted workload to measure the performance capabilities of a web server with added SSL encryption/decryption. The benchmark's metric represents the number of simultaneous connections that a secure Web server can support while meeting specific throughput and error-rate requirements.