

## Performance Brief

# xSeries 440 delivers powerful performance and scalability for secure Web-hosting

## August 2002

The IBM @server x440 servers are high-throughput, 8-way SMP Xeon Processor-based enterprise servers. They deliver excellent scalability for adding memory, adapter cards, or multiple processors. They incorporate the powerful Intel® Xeon<sup>TM</sup> Processor MP.

The SPECweb99\_SSL<sup>1</sup> benchmark was used to measure the xSeries 440 server's performance in configurations that used four and eight processors. The results and configuration details are summarized below.

SPECweb99_SSL - Simultaneous Connections	
Four-Way	Eight-Way
1,168	1,738
System Hardware	
Four 1.6GHz <sup>2</sup> Xeon Processor MP 1MB L3 Cache	Eight 1.6GHz Xeon Processor MP 1MB L3 Cache
4GB Memory	8GB Memory
Seven 18.2GB <sup>3</sup> 15K Ultra320 Disk Drives	Seven 18.2GB 15K Ultra320 Disk Drives
Embedded Adaptec SCSI Controller	Embedded Adaptec SCSI Controller
Operating System and HTTP Software	
Red Hat Linux 7.2 (Linux kernel 2.4.18)	Red Hat Linux 7.2 (Linux kernel 2.4.18)
Zeus V4.1R1	Zeus V4.1R1
Server Cache: None	Server Cache: None
Network Hardware	
Two Intel PRO/1000 XT Adapters	Two Intel PRO/1000 XT Adapters
Two Alteon ACEswitch 180	Two Alteon ACEswitch 180

For a complete list of SPECweb99 SSL results, visit www.spec.org.

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#### **Notes**

- (1) 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.
- (2) GHz only measures microprocessor internal clock speed, not application performance. Many factors affect application performance.
- (3) 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 August 5, 2002.