SPECweb99_SSL Result

© Copyright 1999-2004, Standard Performance Evaluation Corporation

Hewlett-Packard: HP 9000 Model A500
Zeus Technology Limited: Zeus 4.0r1 64bit

SPECweb99_SSL = 225

Test Date: Mar-2002
Tester: Hewlett-Packard Company

Hardware Avail:	Nov-2000	OS Avail:	Dec-2001	HTTPS Software Avail:	Nov-2001	Sup. Software Avail:	Dec-2001	SPEC license #:	3

Hardware

Vendor:	Hewlett-Packard
Model:	HP 9000 Model A500
Processor:	550 Mhz PA-8600
# Processors:	1 core, 1 chip, 1 core/chip
Primary Cache:	512KBI+1024KBD on chip
Secondary Cache:	None
Other Cache:	None
Memory:	8 GB
Disk Subsystem:	1x18GB, 1x36GB (10K rpm)
Disk Controllers:	1 C87x UltraWide SE, 1 C896 UltraWide SE
Other Hardware:	None

Software

Operating System:	HP-UX 11.11i(64-bit)+patches
File System:	See SUT Notes
Other Software:	B3901BA B.11.11.04 HP C/ANSI C

HTTPS Software

Vendor:	Zeus Technology Limited
HTTPS Software:	Zeus 4.0r1 64bit
API:	ISAPI
Server Cache:	See Zeus parameters
Log Mode:	Binary Log Format

Test Sponsor

Test Date:	Mar-2002
Tested By:	Hewlett-Packard Company
SPEC License:	3

Network

# of Controllers:	1
Network Controllers:	HP A4926A PCI Gigabit Ethernet
# of Nets:	1
Type of Nets:	Gigabit Ethernet
Network Speed:	1 Gb/s
MSL (sec):	30 (Non RFC1122)
Time-Wait (sec):	60 (Non RFC1122)
MTU:	1500

Clients

# of Clients:	1
Model:	HP 9000/A500-5X
Processor:	550 Mhz PA-8600
# of Processors:	2
Memory:	4 GB
Network Controller:	HP A4926A, PCI Gigabit Ethernet
Operating System:	HPUX 11.11i (64-bit)
Compiler:	B3901BA B.11.11.04 HP C/ANSI C

Notes/Tuning Information

SUT Notes

All filesystems are HP-UX HFS
1 (36 GB) disk used for file_set

Operating System Notes

HP-UX Internet Operating Environment with following patches:
PHNE_25084 - Cumulative STREAMS Patch
PHNE_25642 - Cumulative ARPA Patch
HP-UX Tunable Parameters:
dbc_max_pct=65 Max Buffer Cache Size as Percent of RAM (50)
dbc_min_pct=65 Min bufer Cache Size as Percent of RAM (5)
maxfiles=60000 Soft File Limit per Process (60)
maxfiles_lim=60000 Hard File Limit per Process (1024)
maxssiz_64bit=0x10000000 Max Stack Size for 64-Bit Procs (0x00800000)
maxswapchunks=4868 Max number of swap chunks (256)
maxuprc=10000 Max number of user processes (75)
nfile=250000 Max number of open files (790)
ninode=150000 Max number of inodes (444)
nkthread=8000 Max number of kernel threads (499)
nproc=1000 Max number of processes (276)
tcphashsz=16384 Relative Scaling Factor for TCP & IP Int. Tables(2048)
vps_ceiling=4096 Max System selected page size [KB] (16)
vps_pagesize=64 Default User page size [KB] (4)

© Copyright 1999-2004, Standard Performance Evaluation Corporation

Notes/Tuning Information (Continued)

HTTPS Software Notes

Zeus Global Parameters:
tuning!cache_files 356750
tuning!cache_max_bytes 0
tuning!cache_small_file 0
tuning!cache_large_file 1048576
tuning!cache_stat_expire 86400
tuning!cache_flush_interval 86400
tuning!listen_queue_size 8192
tuning!multiple_accept yes
tuning!so_rbuff_size 0
tuning!so_wbuff_size 1048576
tuning!cbuff_size 65536
tuning!keepalive yes
tuning!keepalive_timeout 1200
tuning!keepalive_max -1
tuning!timeout 600
tuning!unique_bind yes
tuning!bind_any no
tuning!modules!cgi!cbuff_size 1048576
tuning!modules!cgi!cleansize 0
tuning!ssl_keepalive yes
tuning!softservers no
tuning!use_poll no
tuning!modules!stats!enabled no
tuning!modules!nsapi!enabled no
tuning!modules!isapi!enabled yes
tuning!cache_cooling_time 0
tuning!maxaccept 1024

HTTP API Notes

Zeus ISAPI interface used
Zeus PEPP Toolkit(0.6) used for SPECweb99_SSL dynamic content
./Configure --sendfile=no --checkconfig=yes --locking=semop

Network Notes

1 Alteon 180e switch
Networking Tunable Parameters:
tcp_xmit_hiwater_def=2000000 Max unsent data triggers flow control(32768)
tcp_conn_request_max=1024 Max outstanding connection reqs (20)
tcp_conn_strategy=1 Selects TCP connection strategy (0)
Gigabit Tunable Parameters:
send_max_buffers=32 Number of send buffers consumed to trigger interrupt (16)
recv_max_buffers=12 Number of send buffers consumed to trigger interrupt (1)
recv_coal_ticks=10000 Number of ticks to wait to trigger interrupt (0)
send_coal_ticks=1000 Number of ticks to wait to trigger interrupt (1000)

Client Notes

HP-UX Tunable Parameters:
max_thread_proc=800 Number of threads per process (64)
maxusers=256 Value of MAXUSERS macro (32)
ncallout=5000 Increase number of pending timeouts
nkthread=8000 Maximum number of system-wide threads

SPECweb99_SSL Result

© Copyright 1999-2004, Standard Performance Evaluation Corporation

Notes/Tuning Information (Continued)

Other Notes

Tuning Disclosure: HP-20020318.txt
Dynamic API: HP-20010917-API.tar.gz