SPECweb99 Result

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Hewlett-Packard: HP 9000 Model A500
Zeus Technology Limited: Zeus 3.3.7

SPECweb99 = 1305

Test Date: Nov-2000
Tester: Hewlett-Packard Company

Hardware Avail:	OS Avail:	HTTP Software Avail:	Sup. Software Avail:	SPEC license #:
Nov-2000	Feb-2000	Aug-2000	Aug-2000	3

Hardware

Vendor:	Hewlett-Packard
Model:	HP 9000 Model A500
Processor:	PA8600 550Mhz
# 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:	2 x 18GB (10K rpm)
Disk Controllers:	1 HP Ultra2 SCSI LVD
Other Hardware:	None

Software

Operating System:	HP-UX 11.ACE (64-bit)
File System:	See Notes
Other Software:	A4926A 1000 Base PCI Gb Ethernet B3929BA HP OnLine JFS

HTTP Software

Vendor:	Zeus Technology Limited
HTTP Software:	Zeus 3.3.7
API:	ISAPI
Server Cache:	See Zeus parameters
Log Mode:	Zeus Binary Log Format

Test Sponsor

Test Date:	Nov-2000
Tested By:	Hewlett-Packard Company
SPEC License:	3

Network

# of Controllers:	2
Network Controllers:	HP A4926A PCI Gigabit Ethernet
# of Nets:	2
Type of Nets:	Gigabit Ethernet
Network Speed:	1000 Mbps
MSL (sec):	30 (Non RFC1122)
Time-Wait (sec):	60 (Non RFC1122)
MTU:	1500

Clients

# of Clients:	24
Model:	HP 9000/B180L
Processor:	180Mhz PA7300LC
# of Processors:	1
Memory:	128MByte
Network Controller:	HP A5230A, PCI 100BaseT
Operating System:	HPUX 11.0 ACE
Compiler:	B3901BA B.11.01.20 HP C/ANSI C

Notes/Tuning Information

SUT Notes

Set LargePage attribute on all Zeus Binaries [chatr +pd 16M +pi16M]
OnLineJFS used for /logs
All other filesystems are HP-UX HFS; no options specified

Operating System Notes

HP-UX Patches:
PHCO_22076 - Libc Cumulative Patch
PHKL_18541 - Updated Linkorder Files
PHNE_20125 - NDD General Patch
PHNE_20316 - Cumulative STREAMS Patch
PHNE_21865 - 1000Base-SX/T Cumulative Patch
PHNE_21905 - LAN Product Cumulative Patch
HP-UX Tunable Parameters:
tcphashsz=16384, ninode=92000, nfile=180000
maxfiles=60000, maxuprc=100, nproc=200
maxfiles_lim=60000, dbc_max_pct=85, dbc_min_pct=85
maxdsiz=0x18000000, maxssiz=0x10000000, maxswapchunks=4868
maxdsiz_64bit=0X0000000180000000, vps_pagesize=32
maxssiz_64bit=0X0000000180000000, vps_ceiling=4096

HTTP Software Notes

Zeus Global Parameters:
tuning!cache_files 85001
tuning!cache_max_bytes 0
tuning!cache_small_file 5001
tuning!cache_large_file 1048576

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Notes/Tuning Information (Continued)

HTTP Software Notes (Continued)

tuning!cache_stat_expire 864000
tuning!cache_flush_interval 864000
tuning!listen_queue_size 8192
tuning!multiple_accept yes
tuning!so_rbuff_size 32768
tuning!so_wbuff_size 1048576
tuning!cbuff_size 1048576
tuning!keepalive yes
tuning!keepalive_timeout 600
tuning!keepalive_max -1
tuning!timeout 600
tuning!unique_bind yes
tuning!bind_any no
tuning!sendfile yes
tuning!sendfile_reservefd 45001
tuning!sendfile_minsize 5001
tuning!modules!cgi!cbuff_size 921632
tuning!modules!cgi!cleansize 0
tuning!softservers no
tuning!modules!stats!enabled no
tuning!modules!nsapi!enabled no
tuning!modules!isapi!enabled yes
tuning!modules!fastcgi!enabled yes
tuning!use_poll no

HTTP API Notes

Zeus ISAPI interface used for most dynamic content
FastCGI used as communication method to manage all the independent CGI processes

Network Notes

2 HP Procurve 1600M Switches
Networking Tuning parameters:
tcp_xmit_hiwater_def=2000000 (Default = 32K)
(Amount of unsent data that triggers write-side flow control)
tcp_conn_request_max=1024 (Default = 20)
(Maximum number of outstanding inbound connection requests.)
tcp_conn_strategy=1 (Default = 0)
(Selects tcp connection strategy.)
Gigabit Tuning parameters:
send_max_bufs=32, recv_max_bufs=12
recv_coal_ticks=10000, send_coal_ticks=1000

Client Notes

ncallout 5000 (increase number of pending timers)
max_thread_proc 800 (allow more threads per process)
nkthread 2048 (maximum number of threads system-wide)