SPECweb99 Result

Sun Microsystems: Sun Fire 280R
Zeus Technology Ltd.: Zeus 3.3.8.4

SPECweb99 = 2136
Test Date: Apr-2001
Tester: Sun Microsystems

Hardware Avail: Mar-2001	OS Avail: Jul-2001	HTTP Software Avail: May-2001	Sup. Software Avail: --	SPEC license #: 6

Hardware

Vendor:	Sun Microsystems
Model:	Sun Fire 280R
Processor:	750MHz UltraSPARC III
# Processors:	2 cores, 2 chips, 1 core/chip
Primary Cache:	32KB(I)+64KB(D) on chip
Secondary Cache:	8MB(I+D) off chip
Other Cache:	none
Memory:	8GB
Disk Subsystem:	1 x 36GB FC-AL 9 x 18GB Sun StorEdge T3
Disk Controllers:	Integrated FC-AL PCI Single FC Network Adapter
Other Hardware:	1 x Cisco Systems Catalyst 4912G

Software

Operating System:	Solaris 8 4/01 + patches
File System:	UFS
Other Software:	none

HTTP Software

Vendor:	Zeus Technology Ltd.
HTTP Software:	Zeus 3.3.8.4
API:	ISAPI
Server Cache:	SNCA
Log Mode:	SNCA binary CLF

Test Sponsor

Test Date:	Apr-2001
Tested By:	Sun Microsystems
SPEC License:	6

Network

# of Controllers:	2
Network Controllers:	SUN Gigabit Ethernet
# of Nets:	2
Type of Nets:	Gigabit Ethernet
Network Speed:	1000Mbit/sec
MSL (sec):	30 (Non RFC1122)
Time-Wait (sec):	60 (Non RFC1122)
MTU:	1500

Clients

# of Clients:	8
Model:	Ultra 60
Processor:	450MHz UltraSPARC II
# of Processors:	2
Memory:	512MB
Network Controller:	Sun Gigabit Ethernet
Operating System:	Solaris 8 10/00
Compiler:	Sun Workshop 5.0 C

Notes/Tuning Information

SUT Notes

Operating System Notes

set sq_max_size=0, set segmap_percent=90
set ge:ge_intr_mode=1, set ge:ge_dmaburst_mode=1
set ge:ge_tx_fastdvma_min = 512, set ge:ge_nos_tmds = 2048
set rlim_fd_max=70000 set, rlim_fd_cur=70000
set pcisch:pci_stream_buf_enable = 0
set nca:nca_conn_req_max_q=100000, set nca:nca_conn_req_max_q0=100000
set nca:nca_ppmax=900000, set nca:nca_vpmax=900000
set nca:nca_conn_hash_size=82500, set nca:ncaurihash_sz = 12281
/usr/sbin/ndd -set /dev/nca nca_max_cache_size 900000
/usr/sbin/ndd -set /dev/nca nca_use_segmap 1
/etc/nca/nca.if: ge0 ge1, /etc/nca/ncakmod.conf: status=enabled
/etc/nca/ncalogd.conf: status=enabled, logd_file_size=1000000000
/etc/nca/ncalogd.conf: logd_path_name=/http_logs/log0 ... /http_logs/log12
Solaris 8 patches: Kernel Update patch (108528-09 or newer)
Solaris 8 patches: TCP patch (109472-06 or newer)
Solaris 8 patches: NCA patch (109234-04 or newer)
Solaris 8 patches: libproc patch (108995-02 or newer)
Solaris 8 patches: pstack patch (111295-01 or newer)
Solaris 8 patches: truss patch (109025-03 or newer)
Solaris 8 patches: libc patch (108991-13 or newer)
Solaris 8 patches: libsendfile patch (111297-01 or newer)
Solaris 8 patches: Sun Gigabit Ethernet patch (108813-06 or newer)

SPECweb99 Result

Notes/Tuning Information (Continued)

Operating System Notes (Continued)

Solaris 8 patches: libdevinfo patch (111293-03 or newer)

HTTP Software Notes

Zeus 3.3.8.4 Tuning
Enabled Modules - runningsites/wstest:
cgi, get, index, isapi, map, mime
Parameters - global.cfg:
tuning!modules!stats!enabled no
tuning!use_nca yes
tuning!cache_files 98041
tuning!cache_max_bytes 0
tuning!cache_small_file 4096
tuning!cache_large_file 1048576
tuning!cache_stat_expire 31536000
tuning!cache_flush_interval 31536000
tuning!cache_cooling_time 0
tuning!sendfile yes
tuning!listen_queue_size 8192
tuning!so_wbuff_size 1048576
tuning!so_rbuff_size 0
tuning!modules!cgi!cleansize 0
tuning!cbuff_size 65536
tuning!sendfile_minsize 1
tuning!sendfile_reservefd 69000
tuning!bind_any no

Hardware Notes

Disk Configuration:
OS - 1 Internal FC-AL disk
file_set & post log - T3, 6 disk RAID 0 LUN
access log - T3, 3 disk RAID 0 LUN
Default rd_ahead on and cache auto set in T3

Client Notes

set sq_max_size=0, set hires_tick=1
ndd -set /dev/tcp tcp_smallest_anon_port 2048
ndd -set /dev/tcp tcp_time_wait_interval 60000