SPECweb99_SSL Result

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Sun Microsystems: Sun Fire V240
Sun Microsystems: Sun ONE Web Server 6.0 SP5

SPECweb99_SSL = 833

Test Date: Mar-2003
Tester: Sun Microsystems

Hardware Avail:	May-2003	OS Avail:	Apr-2003	HTTPS Software Avail:	Dec-2002	Sup. Software Avail:	Mar-2003	SPEC license #:	6

Hardware

Vendor:	Sun Microsystems
Model:	Sun Fire V240
Processor:	1002MHz UltraSPARC IIIi
# Processors:	2 cores, 2 chips, 1 core/chip
Primary Cache:	32KBI+64KBD on chip
Secondary Cache:	1MB(I+D) on chip
Other Cache:	none
Memory:	8 GB
Disk Subsystem:	2 x 36GB Ultra160SCSI
Disk Controllers:	Integrated Ultra160SCSI
Other Hardware:	2 x Cisco Catalyst 3508 XL Switch Sun Crypto Accelerator 500

Software

Operating System:	Solaris 9 4/03
File System:	UFS
Other Software:	Sun Crypto Accelerator 1000 patch 114790-01 Netscape Security Services Libraries - NSS 3.4

HTTPS Software

Vendor:	Sun Microsystems
HTTPS Software:	Sun ONE Web Server 6.0 SP5
API:	NSAPI
Server Cache:	SNCA
Log Mode:	SNCA Binary CLF

Test Sponsor

Test Date:	Mar-2003
Tested By:	Sun Microsystems
SPEC License:	6

Network

# of Controllers:	2
Network Controllers:	Internal SUN Broadcom Ethernet
# of Nets:	2
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:	8
Model:	Ultra 60
Processor:	450MHz UltraSPARC II
# of Processors:	2
Memory:	512MB
Network Controller:	Sun GigaSwift Ethernet
Operating System:	Solaris 8 2/02
Compiler:	Sun Workshop 6 update 2 C 5.3

Notes/Tuning Information

SUT Notes

Operating System Notes

```
set autoup=60
set rlim_fd_max=131072
set rlim_fd_cur=131072
set segmap_percent=90
set maxpgio=128
set tcp:tcp_conn_hash_size=65536
set nca:nca_ppmax=840000
set nca:nca_vpmax=840000
set nca:nca_conn_hash_size=393209
set nca:nca_conn_req_max_q=10240
set nca:nca_conn_req_max_q0=10240
set nca:ncaurihash_sz=289669
set nca:ncavnodehash_sz=289669
set nca:nca_ppthresh=128
/usr/sbin/ndd -set /dev/nca nca_http_keep_alive_timeout 30000
/usr/sbin/ndd -set /dev/nca nca_max_cache_size 1000000
/usr/sbin/ndd -set /dev/nca nca_segmap_min_size 4096
/usr/sbin/ndd -set /dev/nca nca_use_segmap 1
/usr/sbin/ndd -set /dev/tcp tcp_time_wait_interval 60000
/usr/sbin/ndd -set /dev/tcp tcp_conn_req_max_q 8192
/usr/sbin/ndd -set /dev/tcp tcp_conn_req_max_q0 8192

/etc/nca/nca.if: bge1 bge2, /etc/nca/ncakmod.conf: status=enabled
```

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Notes/Tuning Information (Continued)

Operating System Notes (Continued)

/etc/nca/ncalogd.conf: status=enabled, logd_file_size=1000000000
/etc/nca/ncalogd.conf: logd_path_name=/http_logs/log0 ... /http_logs/log5

HTTPS Software Notes

Sun ONE 6.0 Tuning
Two unique instances of Sun One started.
The first instance listening on port 80
The second instance listening on port 443
config/magnus.conf (one per instance):
RqThrottle 16
CGIWaitPid on
GIStubIdleTimeout 10000
ThreadIncrement 10
ConnQueueSize 8192
MaxKeepAliveConnections 0
KeepAliveTimeout 0

config/obj.conf (one per instance):
Disable PathCheck for 'check-acl

config/nsfc.conf (one per instance):
FileCacheEnable=true
CopyFiles=false
TransmitFile=true
CacheFileContent=true
MaxAge=86400
MaxFiles=65536
MaxOpenFiles=65536
SmallFileSizeLimit=1000000
SmallFileSpace=1
MediumFileSizeLimit=1000001
MediumFileSpace=1

config/server.xml - webserver instance listening on port 80:
Disable ACLFILE
acceptorthreads=2
family=nca

config/server.xml - webserver instance listening on port 443:
Disable ACLFILE
acceptorthreads=2
family=nca
SSLPARAMS
security=on
ssl2=no
ssl3=yes
ssl3tlsciphers=+rsa_rc4_128_sha
tls=no
clientauth=no

HTTP API Notes

Dynamic API: SUN-20010412-API.tar.gz
Compiled with Sun WorkShop 6 update 2 C 5.3
CFLAGS: -c -x04 -DMCC_HTTPD -DXP_UNIX -DSPAPI20
IFLAGS: -I. -I$(INCLUDEDIR) -I$(INCLUDEDIR)/base -I$(INCLUDEDIR)/frame -I$(INCLUDEDIR)/nspr
LDFLAGS: -G
Flag descriptions in SUN-20030331-APIFlags.txt

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Notes/Tuning Information (Continued)

Hardware Notes

Disk Configuration:
OS & access logs - 1 Internal Ultra160SCSI disk
file_set & post log - 1 Internal Ultra160SCSI disk

Network Notes

2x4 load generators used with each onboard network interface

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
Client code generated with: CFLAGS=-xO4 -xchip=ultra -xarch=v8plusa
./configure --enable-posix-threads --enable-gethostbyname_r --enable-pthread_scope_system --enable-rlimit --enable-safe-usleep=no

Other Notes

Tuning Disclosure: Sun-20030331.txt
Sun ONE Web Server 6.0 Tuning Guide: http://docs.sun.com

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SPEC has determined that this result was not in compliance
with the SPEC continued availability policy. Specifically,
although the configuration tested was available within the
required 3 months of publication, it was then unavailable for
a period of 30 days or more during the first 90 days after
initial overall availability. The vendor informs SPEC that
the configuration is again available, on or before the date
of this notice, 08/22/2003.
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