### SPECweb99_SSL Result

**Sun Microsystems: Sun Fire V240**

**Sun Microsystems: Sun ONE Web Server 6.0 SP5**

<table>
<thead>
<tr>
<th>Hardware</th>
<th>Test Sponsor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vendor: Sun Microsystems</td>
<td>Test Date: Mar-2003</td>
</tr>
<tr>
<td>Model: Sun Fire V240</td>
<td>Tested By: Sun Microsystems</td>
</tr>
<tr>
<td>Processor: 1002MHz UltraSPARC IIIi</td>
<td>SPEC License: 6</td>
</tr>
<tr>
<td># Processors: 2 cores, 2 chips, 1 core/chip</td>
<td></td>
</tr>
<tr>
<td>Primary Cache: 32KB1+64KBD on chip</td>
<td></td>
</tr>
<tr>
<td>Secondary Cache: 1MB(I+D) on chip</td>
<td></td>
</tr>
<tr>
<td>Other Cache: none</td>
<td></td>
</tr>
<tr>
<td>Memory: 8 GB</td>
<td></td>
</tr>
<tr>
<td>Disk Subsystem: 2 x 36GB Ultra160 SCSI</td>
<td></td>
</tr>
<tr>
<td>Disk Controllers: Integrated Ultra160CSI</td>
<td></td>
</tr>
<tr>
<td>Other Hardware: 2 x Cisco Catalyst 3508 XL Switch</td>
<td></td>
</tr>
<tr>
<td>Sun Crypto Accelerator 500</td>
<td></td>
</tr>
<tr>
<td>Operating System: Solaris 9 4/03</td>
<td></td>
</tr>
<tr>
<td>File System: UFS</td>
<td></td>
</tr>
<tr>
<td>Other Software: Sun Crypto Accelerator 1000 patch 114790-01 Netscape Security Services Libraries - NSS 3.4</td>
<td></td>
</tr>
<tr>
<td>HTTPS Software Vendor: Sun Microsystems</td>
<td></td>
</tr>
<tr>
<td>HTTPS Software: Sun ONE Web Server 6.0 SP5</td>
<td></td>
</tr>
<tr>
<td>API: NSAPI</td>
<td></td>
</tr>
<tr>
<td>Server Cache: SNCA</td>
<td></td>
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<tr>
<td>Log Mode: SNCA Binary CLF</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Test Sponsor</th>
<th>Network</th>
</tr>
</thead>
<tbody>
<tr>
<td># of Controllers: 2</td>
<td></td>
</tr>
<tr>
<td>Network Controllers: Internal SUN Broadcom Ethernet</td>
<td></td>
</tr>
<tr>
<td># of Nets: 2</td>
<td></td>
</tr>
<tr>
<td>Type of Nets: Gigabit Ethernet</td>
<td></td>
</tr>
<tr>
<td>Network Speed: 1 Gb/s</td>
<td></td>
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<tr>
<td>MSL (sec): 30 (Non RFC1122)</td>
<td></td>
</tr>
<tr>
<td>Time-Wait (sec): 60 (Non RFC1122)</td>
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<tr>
<td>MTU: 1500</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Test Sponsor</th>
<th>Clients</th>
</tr>
</thead>
<tbody>
<tr>
<td># of Clients: 8</td>
<td></td>
</tr>
<tr>
<td>Model: Ultra 60</td>
<td></td>
</tr>
<tr>
<td>Processor: 450MHz UltraSPARC II</td>
<td></td>
</tr>
<tr>
<td># of Processors: 2</td>
<td></td>
</tr>
<tr>
<td>Memory: 512MB</td>
<td></td>
</tr>
<tr>
<td>Network Controller: Sun GigaSwift Ethernet</td>
<td></td>
</tr>
<tr>
<td>Operating System: Solaris 8 2/02</td>
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<tr>
<td>Compiler: Sun Workshop 6 update 2 C 5.3</td>
<td></td>
</tr>
</tbody>
</table>

### Notes/Tuning Information

**SUT Notes**

**Operating System Notes**

```plaintext
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_vpmx=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:nca weirhash_sz=289669
set nca:ncaurahash_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_max_cache_size 1000000
/usr/sbin/ndd -set /dev/nca nca_max_cache_size 4096
/usr/sbin/ndd -set /dev/nca nca_use_cache 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/nca.kmod.conf: status=enabled
```

For more Information Contact SPEC

info@spec.org

http://www.spec.org
Notes/Tuning Information (Continued)

Operating System Notes (Continued)
/etc/nca/ncalogd.conf: status=enabled, logd_file_size=100000000
/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$(INCLUDEDIR)/nspr -I$(INCLUDEDIR)/frame
LDFLAGS: -G
Flag descriptions in SUN-20030331-APIFlags.txt

For more Information SPEC
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http://www.spec.org
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

********************************************************************************
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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