

SPECweb99_SSL Result

```

=====
Hewlett-Packard : HP Integrity rx4640      ||      NC      SPECweb99_SSL
Zeus Technology Limited : Zeus 4.3r2      ||
=====

```

SPEC has determined that this result was not in compliance with the SPECweb99_SSL run and reporting rules. Specifically, the result did not meet the 3 month availability requirement in the SPECweb99_SSL run rules due to a change in availability of a dependency of the web server.

PERFORMANCE

Iteration	Conforming Simultaneous Connections
1	NC
2	NC
3	NC
Median	NC

Availability Dates

```

All Hardware          Dec-2004
HTTPS Software        Oct-2005
Operating System      Jul-2005
Supplemental System   Jul-2005

```

Hardware

```

Vendor                Hewlett-Packard
Model                 HP Integrity rx4640
Processor              1.6 GHz Intel Itanium2 9M
# Processors           1 core, 1 chip, 1 core/chip
Primary Cache          16KBI + 16KBD on chip
Secondary Cache        256KB unified on chip
Other Cache            9216KB unified on chip
Memory                 32 GB (32x1GB)
Disk Subsystem         2x73GB(15K RPM)
Disk Controllers       1 SCSI C1010 Fast Wide LVD (Internal)
Other Hardware         1 x HP Procurve 2724 Switch

```

Software

```

Operating System      SuSE SLES 9 SP2
File System            See Notes
Other Software         gcc 3.3.3 from distro

```

HTTPS Software

```

Vendor                Zeus Technology Limited
HTTPS Software        Zeus 4.3r2
API                   ISAPI
Server Cache          none
Log Mode              Binary Log Format

```

Test Sponsor

```

Test Date             Jul-2005
Tested By             Hewlett-Packard Company
SPEC License          3

```

Network

```

# of Controllers      1
Network Controllers   A9900A PCI-X 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          3
Model                 HP Integrity rx2600
Processor              1.0GHz Intel Itanium2
# of Processors        2
Memory                6GB
Network Controller     HP A6825A

```

Operating System HPUX 11i V2
Compiler B3901BA HP C/ANSI C

Benchmark Configuration

Requested Connections 1350
Fileset Size (MB) 4440.8

=====

Notes/Tuning information

SUT Notes

Two 73GB 15K RPM SCSI
1x73GB disk partitioned for OS and logs
OS ReiserFS with defaults
Log filesystem ext2 with noatime,nodiratime - no inode access time updates, no access control lists
1x73GB disk used for file_set
file_set filesystem ext2 mounted noatime,nodiratime - no inode access time updates, no access control lists

Operating System Notes

sysctl tunes:
net.core.rmem_max=1048576, maximum receive socket buffer size (default 65535)
net.core.rmem_default=1048576, default receive socket buffer size (default 65535)
net.core.wmem_max=1048576, , maximum send socket buffer size (default 65535)
net.core.wmem_default=1048576, default send socket buffer size (default 65535)
net.ipv4.tcp_max_syn_backlog=20480, sets length of per-socket backlog queue (default 1024)
net.ipv4.tcp_syncookies=0, Disable TCP SYN Cookie Protection (default 1)
net.ipv4.tcp_timestamps=0, turns TCP timestamp support off (default 1)
net.ipv4.tcp_max_tw_buckets=2000000, sets TCP time-wait buckets pool size (default 180000)
net.core.netdev_max_backlog=20000, number of unprocessed input packets before kernel starts dropping them (default 300)
net.core.somaxconn=20480, maximum length of the listen queue (128)
sys.vm.max_map_count=131072, maximum number of active map areas (65536)
fs.file-max=2000000, maximum number of open files (default 1024)
ulimit -n 500000 (prior to launching web server), sets number of open files (default 1024)

HTTPS Software Notes

Zeus Global Parameters:
tuning!modules!cgi!minuid 0
tuning!modules!cgi!mingid 0
tuning!bind any no
tuning!cache_cooling_time 0
tuning!cache_files 569263
tuning!cache_flush_interval 180000
tuning!cache_large_file 1048576
tuning!cache_max_bytes 0
tuning!cache_small_file 90000
tuning!cache_stat_expire 180000
tuning!cbuff_size 65536
tuning!client_first_optimise yes
tuning!fadvise!max_unflushed 2147483647
tuning!keepalive_max -1
tuning!keepalive_timeout 1200
tuning!keepalive yes
tuning!listen_queue_size 8192
tuning!max_connections -1
tuning!maxaccept 2048
tuning!modules!cgi!cbuff_size 1048576
tuning!modules!cgi!cleansize 0
tuning!modules!isapi!enabled yes
tuning!modules!nsapi!enabled no
tuning!modules!stats!enabled no
tuning!multiple_accept yes
tuning!sendfile no
tuning!softservers no
tuning!so_rbuff_size 0
tuning!so_wbuff_size 1048576
tuning!support_tls1 no
tuning!ssl_keepalive yes
tuning!ssl_sessioncache_size 9109
tuning!ssl_diskcache no
tuning!ssl_cbuff_size 103000
tuning!ssl_sessioncache_expiry 120
tuning!timeout 600
tuning!unique_bind yes
tuning!use_poll no
Zeus runningsite configuration:
modules!cgi!enabled yes
modules!isapi!enabled yes

HTTP API Notes

Zeus ISAPI interface used
Zeus PEPP Toolkit (0.9) used for SPECweb99 dynamic content
./Configure -ssl=yes
compiled with gcc 3.3.3 from distro

Network Notes

Networking Tunable Parameters:
Ehttool used to disable TSO on the NIC (default enabled)
InterruptThrottleRate=700 (via modprobe) Set maximum interrupt rate for NIC (default dynamic)
RxDescriptors=512 (via modprobe) Number of receive descriptors allocated (default 256)
txqueuelen=20000 (via ifconfig) Sets transmit queue length (default 100)

Client Notes

Client code generated with ./configure --enable-posix-threads
HP-UX Tunable Parameters:
max_thread_proc=4096 Number of threads per process (64)

Other Notes

Tuning Disclosure: HP-20030414.txt
Dynamic API: HP-20020724-API.tgz

=====

Test Run Details

Run Num	Conforming Connections	Percent Conform	Throughput ops/sec	Response msec	ops/sec/ loadgen	Kbits/sec
1	NC	NC	NC	NC	NC	NC
1	NC	NC	NC	NC	NC	NC
1	NC	NC	NC	NC	NC	NC