SPECweb99_SSL Result

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IBM: BladeCenter HS20
Zeus: Zeus V4.2r4 (64-bit)

SPECweb99_SSL =2030

Test Date: Sep-2004
Tester: IBM

Hardware Avail:	Oct-2004	OS Avail:	Aug-2004	HTTPS Software Avail:	Nov-2003	Sup. Software Avail:	Nov-2003	SPEC license #:	11

Hardware

Vendor: IBM
Model: BladeCenter HS20
Processor: 3.6 GHz Intel Xeon DP
Processors: 2
Primary Cache: 12KBI+16KBD on chip
Secondary Cache: 1024KB
Other Cache: None
Memory: 8GB
Disk Subsystem: 2 73GB SCSI Drives
Disk Controllers: Onboard SCSI
Other Hardware:

Operating System Notes

Tuning parameters:
- net.ipv4.ip_forward=1, default 0
- net.ipv4.tcp_timestamps = 0, turns TCP timestamp support off, default 1
- net.ipv4.tcp_max_tw_buckets = 456000, sets TCP time-wait buckets pool size, default 180000
- net.core.wmem_max = 10000000, maximum send socket buffer size, default 65535
- net.core.wmem_default = 10000000, default send socket buffer size, default 65535
- net.core.optmem_max = 10000000, default 10240
- net.core.optmem_default = 10000000, maximum amount of option memory buffers, default 10240
- net.core.hot_list_length = 10000, maximum number of skb-heads to be cached, default 128
- net.core.netdev.max_backlog = 300000, default 300
- net.ipv4.tcp_rmem = 30000000 30000000 30000000, maximum TCP read-buffer space allocatable, default 4096 87380 174760
- net.ipv4.tcp_wmem = 30000000 30000000 30000000, maximum TCP write-buffer space allocatable, default 4096 16384 131072
- net.ipv4.tcp_mem = 30000000 30000000 30000000, maximum TCP buffer space, default 31744 32256 32768
- net.ipv4.tcp_max_syn_backlog = 8192
- fs.file-max = 254108, increases number of open file handles kernel allocates, default 4096
- NIC's txqueuelen was set to 40000, default 1000
- NIC's IRQ was bound to logical CPU, default unbound
- irqbalancer service was disabled during run
- ulimit -n 10000, sets number of open files, default 1024

Kernel is standard default SLES 9 (2.6.5-7.97-smp)

HTTPS Software Notes

Zeus Configuration
- tuning!listen_queue_size 8192
- tuning!so_wbuff_size 1048576
- tuning!so_rbuff_size 0
- tuning!maxaccept 2500
- tuning!clientfirst_optimise yes
- tuning!unique_bind no
- tuning!cache_stat_expire 31536000
- tuning!cache_max_bytes 0
- tuning!cache_flush_interval 31536000
- tuning!cache_files 282011
- tuning!cache_cooling_time 0
- tuning!sendfile yes
- tuning!sendfile_minsize 1
- tuning!softservers no
- tuning!keepalive_timeout 30
- tuning!keepalive_max -1
- tuning!ssl_sessioncache_size 7507
- tuning!cbuff_size 65536
- tuning!isapi!enabled yes
- tuning!modules!stats!enabled no
- tuning!modules!cgi!enabled yes
- tuning!modules!cgi!cleansize 0
- tuning!modules!security!enabled yes
- tuning!num_children 8

ISAPI Source code is available in the SPECweb99_SSL support docs as HP-20020724-API.tar.gz

Notes/Tuning Information

SUT Notes

2 disks configured with software RAID0 for access log and file set
One Partition for OS