SPEC SFS 1 Summary (Side 1 of 2) 097.LADDIS

Sun Microsystems Inc.
Enterprise 4000/10

Server Hardware

CPU, Memory, & Power

Model No.	Model 4000/10
CPU	167MHz UltraSPARC
# of CPUs	10
Primary Cache	16KBI+16KBD on chip
Secondary Cache	1024KB(I+D) off chip
Other Cache	None
Memory	3GB
UPS	None
Other hardware	None

Server Software

OS Version	Solaris 2.5.1
Other software	None
File system	UFS

Load Generators (LGs)

Number of Load Generators:	12
Processes Per Load Generator:	18
Biod_Max_Reads:	3
Biod_Max_Writes:	5

Disk Subsystem & Filesystems

(Full Configuration on Side 2)

Num Disk Controllers	9
Num Disks	218
Num File Systems	216

Network Subsystem

(Full Configuration On Side 2)

Num Net Controllers	6
Num Networks	6
Type Network	100MBit Sun FastEthernet

Server Tuning

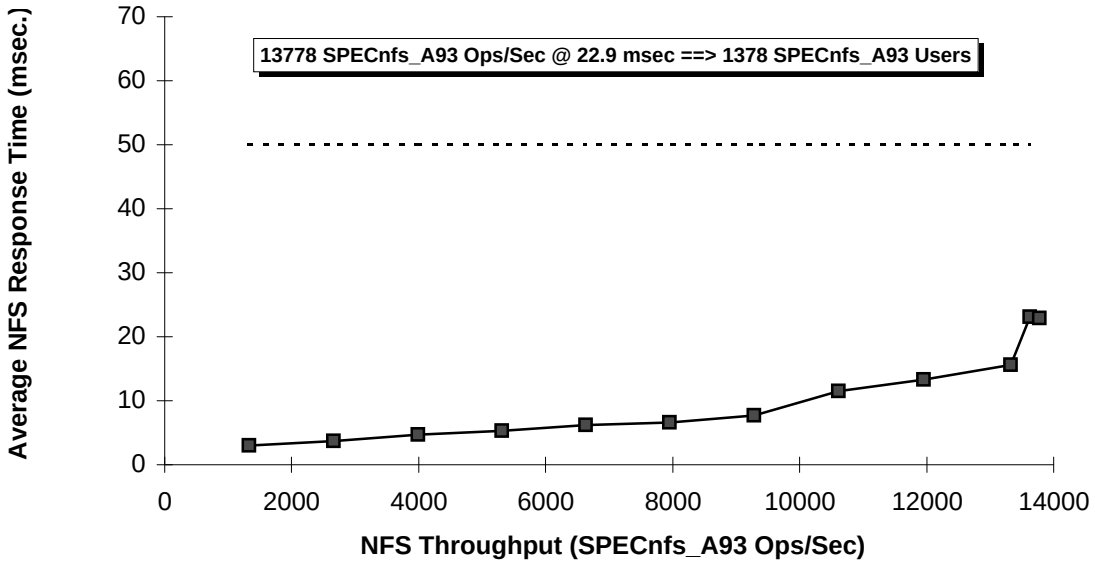
(Also see Notes/Tuning below)

Buffer Cache Size	Dynamic
Num NFS Daemons	511
Fileset Size	74.7GB

NFS Throughput SPECnfs_A93 Ops/Sec	Avg. Response Time (NFS) Milliseconds
1329	3.0
2659	3.7
3990	4.7
5308	5.3
6631	6.2
7950	6.6
9278	7.7
10614	11.5
11953	13.3
13322	15.6
13627	23.1
13778	22.9

Hardware Availability: Aug-96 **Software Availability:** May-96

License #: 6 **Tested:** Jul-96 **By:** Sun **Of:** Mountain View



Notes/Summary Of Tuning Parameters: (Continued on Side 2 of 2)

IGNORE_KERNEL_PREEMPTION=1

ncsize=262144

bufhwm=262144

SSA fast_write enabled

SPEC SFS 1 Summary (Side 2 of 2) 097.LADDIS

Sun Microsystems Inc.
Enterprise 4000/10

Detailed Server Description

Network Subsystem

1 Sun FastEthernet (N1): 2 LGs
2 Sun FastEthernet (N2): 2 LGs
3 Sun FastEthernet (N3): 2 LGs
4 Sun FastEthernet (N4): 2 LGs
5 Sun FastEthernet (N5): 2 LGs
6 Sun FastEthernet (N6): 2 LGs

Disk Subsystem & Filesystems

Controller 1: On-board SCSI-2
Disks: 2 2GB 7200rpm
Controller 2-5: Fiber Channel SBus (FC25/S) / Fiber Channel Optical Module (FC25/OM)
Disks: SPARCstorage Array 102 w/ 30 2GB 7200rpm drives
Contents 2: F1-F30
Contents 3: F31-F60
Contents 4: F61-F90
Contents 5: F91-F120
Controller 6-9: Fiber Channel SBus (FC25/S) / Fiber Channel Optical Module (FC25/OM)
Disks: SPARCstorage Array 102 w/ 24 2GB 7200rpm drives
Contents 6: F121-F144
Contents 7: F145-F168
Contents 8: F169-F192
Contents 9: F193-F216

Detailed Load Generator (LG) Description

Load Gen. Type	*Model*	*# of CPUs*	*RAM*	*OS*	*Compiler*
LG1	Ultra1-170	1	64MB	Solaris 2.5.1	SC3.0

Testbed Configuration

Load Gen. #	*Load Gen. Type*	*Network*	*Target File Systems*	*Notes*
1	LG1	N1	F1,F13,...,F205	rw,anon=0
2	LG1	N1	F2,F14,...,F206	rw,anon=0
3	LG1	N2	F3,F15,...,F207	rw,anon=0
4	LG1	N2	F4,F16,...,F208	rw,anon=0
5	LG1	N3	F5,F17,...,F209	rw,anon=0
6	LG1	N3	F6,F18,...,F210	rw,anon=0
7	LG1	N4	F7,F19,...,F211	rw,anon=0
8	LG1	N4	F8,F20,...,F212	rw,anon=0
9	LG1	N5	F9,F21,...,F213	rw,anon=0
10	LG1	N5	F10,F22,...,F214	rw,anon=0
11	LG1	N6	F11,F23,...,F215	rw,anon=0
12	LG1	N6	F12,F24,...,F216	rw,anon=0

Notes/Summary Of Tuning Parameters: (Continued from Side 1 of 2)