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

Sun Microsystems Inc.
Enterprise 4000/12

Server Hardware

CPU, Memory, & Power

Model No.	Model 4000/12
CPU	167MHz UltraSPARC
# of CPUs	12
Primary Cache	16KBI+16KBD on chip
Secondary Cache	512KB(I+D) off chip
Other Cache	None
Memory	2GB
UPS	None
Other hardware	None

Server Software

OS Version	Solaris 2.5.1 pre-FCS
Other software	None
File system	UFS

Load Generators (LGs)

Number of Load Generators:	10
Processes Per Load Generator:	19
Biod_Max_Reads:	2
Biod_Max_Writes:	3

Disk Subsystem & Filesystems

(Full Configuration on Side 2)

Num Disk Controllers	9
Num Disks	192
Num File Systems	190

Network Subsystem

(Full Configuration On Side 2)

Num Net Controllers	5
Num Networks	5
Type Network	100MBit Sun FastEthernet

Server Tuning

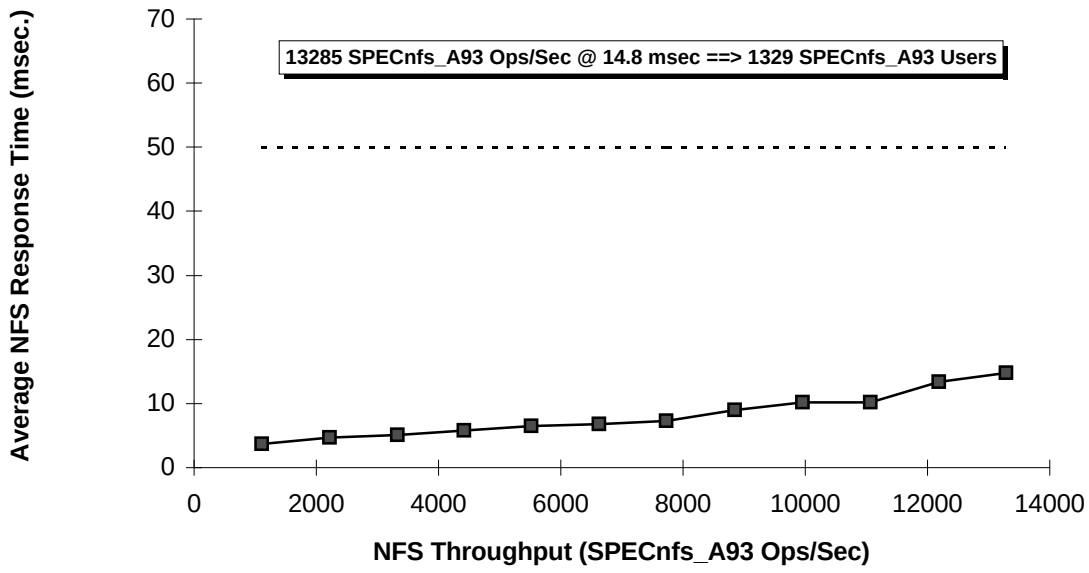
(Also see Notes/Tuning below)

Buffer Cache Size	Dynamic
Num NFS Daemons	512
Fileset Size	68.5GB

NFS Throughput SPECnfs_A93 Ops/Sec	Avg. Response Time (NFS) Milliseconds
1110	3.7
2215	4.7
3328	5.1
4423	5.8
5523	6.5
6630	6.8
7730	7.3
8843	9.0
9954	10.2
11066	10.2
12188	13.4
13285	14.8

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

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



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

bufhwm=131072

IGNORE_KERNEL_PREEMPTION=1

ncsize=131072

SSA fast_write enabled

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

Sun Microsystems Inc.
Enterprise 4000/12

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

Disk Subsystem & Filesystems

Controller 1: On-board SCSI-2
Disks: 2 2GB 7200rpm

Controller 2-9:
Fiber Channel SBus (FC25/S) /Fiber Channel Optical Module (FC25/OM)
Disks: SPARCstorage Array 102 w/ 24 2GB 7200rpm drives
Contents 2: F1-F24
Contents 3: F25-F48
Contents 4: F49-F72
Contents 5: F73-F96
Contents 6: F97-F120
Contents 7: F121-F144
Contents 8: F145-F168

Detailed Load Generator (LG) Description

Load Gen. Type	*Model*	*# of CPUs*	*RAM*	*OS*	*Compiler*
LG1	SS20-712	2	64MB	Solaris 2.5.1 pre-FCS	SC3.0

Testbed Configuration

Load Gen. #	*Load Gen. Type*	*Network*	*Target File Systems*	*Notes*
1	LG1	N1	F1,F11,...,F181	rw,anon=0
2	LG1	N1	F2,F12,...,F182	rw,anon=0
3	LG1	N2	F3,F13,...,F183	rw,anon=0
4	LG1	N2	F4,F14,...,F184	rw,anon=0
5	LG1	N3	F5,F15,...,F185	rw,anon=0
6	LG1	N3	F6,F16,...,F186	rw,anon=0
7	LG1	N4	F7,F17,...,F187	rw,anon=0
8	LG1	N4	F8,F18,...,F188	rw,anon=0
9	LG1	N5	F9,F19,...,F189	rw,anon=0
10	LG1	N5	F10,F20,...,F190	rw,anon=0

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