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	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:	20
Biod_Max_Reads:	3
Biod_Max_Writes:	5

Disk Subsystem & Filesystems

(Full Configuration on Side 2)

Num Disk Controllers	9
Num Disks	242
Num File Systems	240

Network Subsystem

(Full Configuration On Side 2)

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

Server Tuning

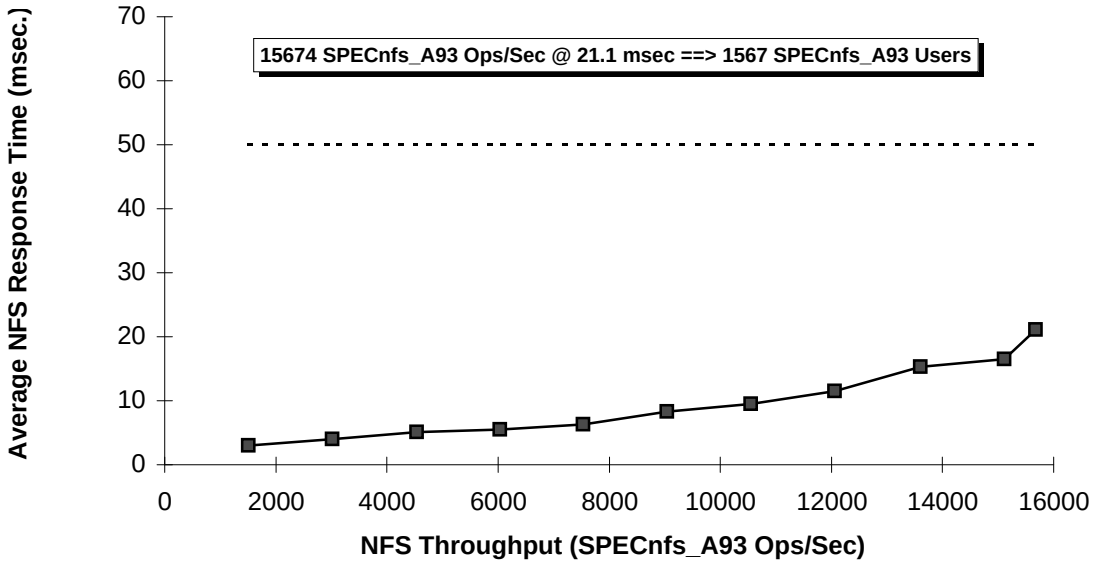
(Also see Notes/Tuning below)

Buffer Cache Size	Dynamic
Num NFS Daemons	511
Fileset Size	81.0GB

NFS Throughput SPECnfs_A93 Ops/Sec	Avg. Response Time (NFS) Milliseconds
1511	3.0
3020	4.0
4533	5.1
6032	5.5
7539	6.3
9041	8.3
10547	9.5
12063	11.5
13599	15.3
15108	16.5
15674	21.1

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 4000/12

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
6 Sun FastEthernet (N6): 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/ 30 2GB 7200rpm drives
Contents 2: F1-F30
Contents 3: F31-F60
Contents 4: F61-F90
Contents 5: F91-F120
Contents 6: F121-F150
Contents 7: F151-F180
Contents 8: F181-F210
Contents 9: F211-F240

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,...,F229	rw,anon=0
2	LG1	N1	F2,F14,...,F230	rw,anon=0
3	LG1	N2	F3,F15,...,F231	rw,anon=0
4	LG1	N2	F4,F16,...,F232	rw,anon=0
5	LG1	N3	F5,F17,...,F233	rw,anon=0
6	LG1	N3	F6,F18,...,F234	rw,anon=0
7	LG1	N4	F7,F19,...,F235	rw,anon=0
8	LG1	N4	F8,F20,...,F236	rw,anon=0
9	LG1	N5	F9,F21,...,F237	rw,anon=0
10	LG1	N5	F10,F22,...,F238	rw,anon=0
11	LG1	N6	F11,F23,...,F239	rw,anon=0
12	LG1	N6	F12,F24,...,F240	rw,anon=0

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