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

Silicon Graphics

Challenge XL 12 x 250 MHz R4400

Server Hardware

CPU, Memory, & Power

Model No.	R-49612-S4
CPU	250MHz MIPS R4400
# of CPUs	12
Primary Cache	16KBI+16KBD on chip
Secondary Cache	4MB(I+D) off chip
Other Cache	None
Memory	1024MB 4-way interleaved
UPS	None
Other hardware	FDDI

Server Software

OS Version	IRIX 6.2
Other software	FDDIXpress, NFS
File system	XFS

Load Generators (LGs)

Number of Load Generators:	12
Processes Per Load Generator:	20
Biod_Max_Reads:	2
Biod_Max_Writes:	2

Disk Subsystem & Filesystems

(Full Configuration on Side 2)

Num Disk Controllers	16
Num Disks	121
Num File Systems	120 (FS0-FS119)

Network Subsystem

(Full Configuration On Side 2)

Num Net Controllers	6
Num Networks	6 (N1-N6)
Type Network	FDDI

Server Tuning

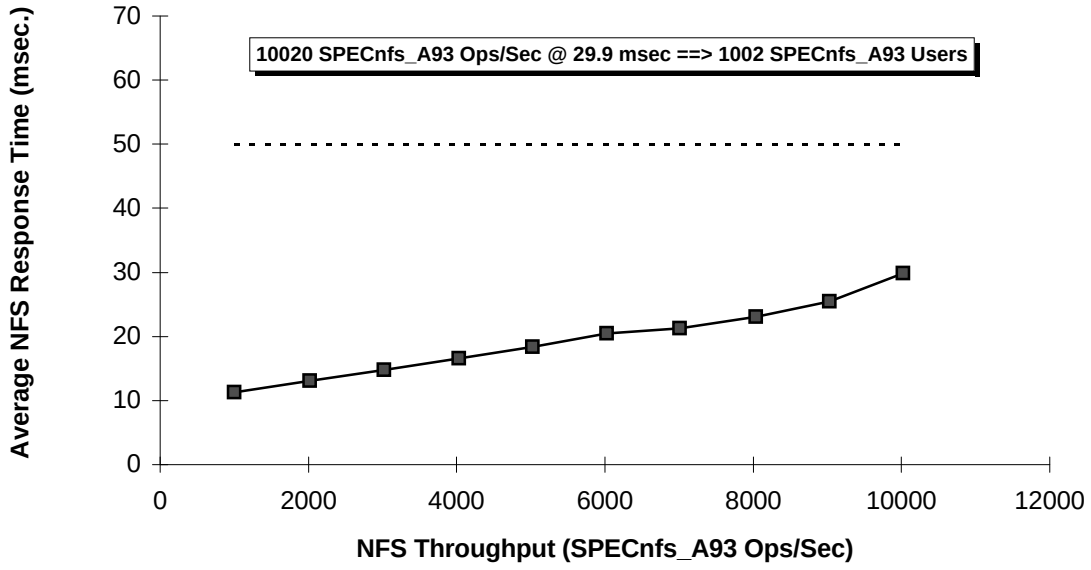
(Also see Notes/Tuning below)

Buffer Cache Size	Dynamic
Num NFS Daemons	270
Fileset Size	54GB

NFS Throughput SPECnfs_A93 Ops/Sec	Avg. Response Time (NFS) Milliseconds
1003	11.3
2021	13.1
3019	14.8
4030	16.6
5021	18.4
6023	20.5
7013	21.3
8034	23.1
9028	25.5
10020	29.9

Hardware Availability: Sep-95 **Software Availability:** Mar-96

License #: 4 **Tested:** Feb-96 **By:** SGI **Of:** Mountain View, CA



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

ncsize = 90000

All filesystems are mounted in wsync mode.

All filesystems are exported in wsync mode.

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

Silicon Graphics
Challenge XL 12 x 250 MHz R4400

Detailed Server Description

Network Subsystem

3 C8-FDDIXPHID FDDI controllers
each controller connects to 2 FDDI rings

Disk Subsystem & Filesystems

Cont 1: SCSI Fast/Wide Diff; 1 SCSI 2GB; OS, swap space
Cont 2-16: SCIP-SCSI Fast/Wide Diff; disks 1-120: 2GB Quantum
Contr 2: Disks: 1-8,FS0,15,30,45,60,75,90,105
Cont 3: Disks: 9-16,FS1,16,31,46,61,76,91,106
Cont 4: Disks: 17-24,FS2,17,32,47,62,77,92,107
Cont 5: Disks: 25-32,FS3,18,33,48,63,78,93,108
Cont 6: Disks: 33-40,FS4,19,34,49,64,79,94,109
Cont 7: Disks: 41-48,FS5,20,35,50,65,80,95,110
Cont 8: Disks: 49-56,FS6,21,36,51,66,81,96,111
Cont 9: Disks: 57-64,FS7,22,37,52,67,82,97,112
Cont 10: Disks: 65-72,FS8,23,38,53,68,83,98,113
Cont 11: Disks: 73-80,FS9,24,39,54,69,84,99,114
Cont 12: Disks: 81-88,FS10,25,40,55,70,85,100,115
Cont 13: Disks: 89-96,FS11,26,41,56,71,86,101,116
Cont 14: Disks: 97-104,FS12,27,42,57,72,87,102,117
See Notes Section For Rest Of Configuration

Detailed Load Generator (LG) Description

Load Gen. Type	*Model*	*# of CPUs*	*RAM*	*OS*	*Compiler*
LG1	Indy	1 200MH	32MB	IRIX 5.3	Ansi C, 3.17

Testbed Configuration

Load Gen. #	*Load Gen. Type*	*Network*	*Target File Systems*	*Notes*
1	LG1	N1	FS0-FS19	
2	LG1	N1	FS20-FS39	
3	LG1	N2	FS40-FS59	
4	LG1	N2	FS60-FS79	
5	LG1	N3	FS80-FS99	
6	LG1	N3	FS100-FS119	
7	LG1	N4	FS0-FS19	
8	LG1	N4	FS20-FS39	
9	LG1	N5	FS40-FS59	
10	LG1	N5	FS60-FS79	
11	LG1	N6	FS80-FS99	
12	LG1	N6	FS100-FS119	

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

Configuration continued from "Detailed Server Configuration"
Cont 15: Disks: 105-112,FS13,28,43,58,73,88,103,118
Cont 16: Disks: 113-120,FS14,29,44,59,74,89,104,119