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

Silicon Graphics
Challenge XL 8 x 250 MHz R4400

Server Hardware

CPU, Memory, & Power

Model No.	D-49608-S4
CPU	250MHz MIPS R4400
# of CPUs	8
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:	8
Processes Per Load Generator:	24
Biod_Max_Reads:	2
Biod_Max_Writes:	2

Disk Subsystem & Filesystems

(Full Configuration on Side 2)

Num Disk Controllers	13
Num Disks	97
Num File Systems	96 (FS0-FS95)

Network Subsystem

(Full Configuration On Side 2)

Num Net Controllers	4
Num Networks	4 (N1-N4)
Type Network	FDDI

Server Tuning

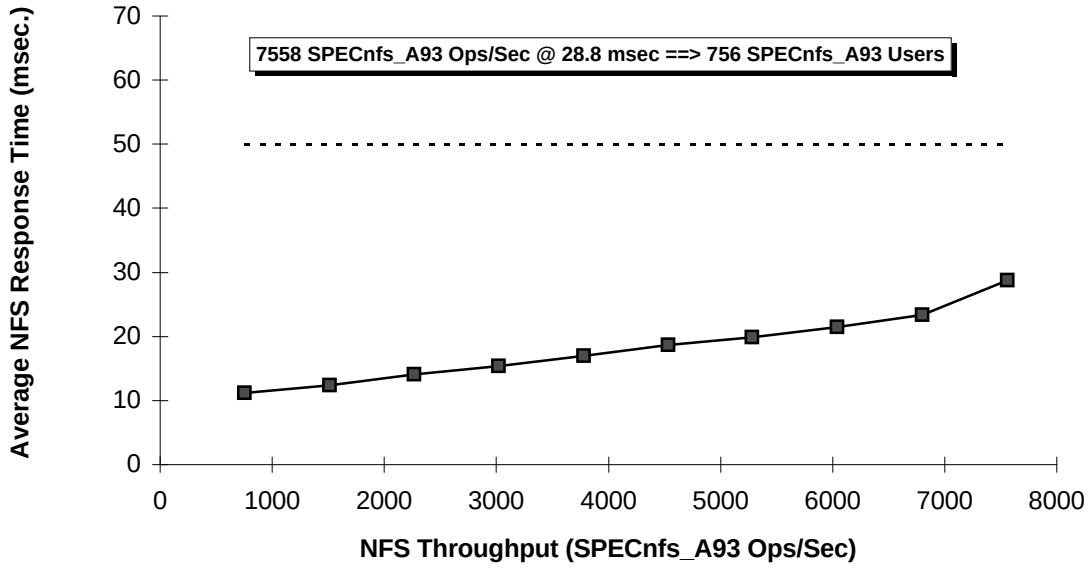
(Also see Notes/Tuning below)

Buffer Cache Size	Dynamic
Num NFS Daemons	230
Fileset Size	41GB

NFS Throughput SPECnfs_A93 Ops/Sec	Avg. Response Time (NFS) Milliseconds
755	11.2
1512	12.4
2268	14.1
3022	15.4
3780	17.0
4534	18.7
5282	19.9
6041	21.5
6800	23.4
7558	28.8

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 = 65000

All filesystems are mounted in wsync mode.

All filesystems are exported in wsync mode.

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

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Detailed Server Description

Network Subsystem

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

Disk Subsystem & Filesystems

Controller 1: SCSI Fast/Wide Diff
Disks: 1 SCSI 2GB; Contents: OS, swap space
Controllers 2-13: SCIP-SCSI Fast/Wide Diff
Disks 1-96: 2GB Quantum
Controller 2: Disks: 1-8,FS0,12,24,36,48,60,72,84
Controller 3: Disks: 9-16,FS1,13,25,37,49,61,73,85
Controller 4: Disks: 17-24,FS2,14,26,38,50,62,74,86
Controller 5: Disks: 25-32,FS3,15,27,39,51,63,75,87
Controller 6: Disks: 33-40,FS4,16,28,40,52,64,76,88
Controller 7: Disks: 41-48,FS5,17,29,41,53,65,77,89
Controller 8: Disks: 49-56,FS6,18,30,42,54,66,78,90
Controller 9: Disks: 57-64,FS7,19,31,43,55,67,79,91
Controller 10: Disks: 65-72,FS8,20,32,44,56,68,80,92
Controller 11: Disks: 73-80,FS9,21,33,45,57,69,81,93
Controller 12: Disks: 81-88,FS10,22,34,46,58,70,82,94
Controller 16: Disks: 89-96,FS11,23,35,47,59,71,83.95

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-FS11	
2	LG1	N1	FS12-FS23	
3	LG1	N2	FS24-FS35	
4	LG1	N2	FS36-FS47	
5	LG1	N3	FS0-FS11	
6	LG1	N3	FS12-FS23	
7	LG1	N4	FS24-FS35	
8	LG1	N4	FS36-FS47	

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