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	4GB
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:	12
Processes Per Load Generator:	20
Biod_Max_Reads:	2
Biod_Max_Writes:	3

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

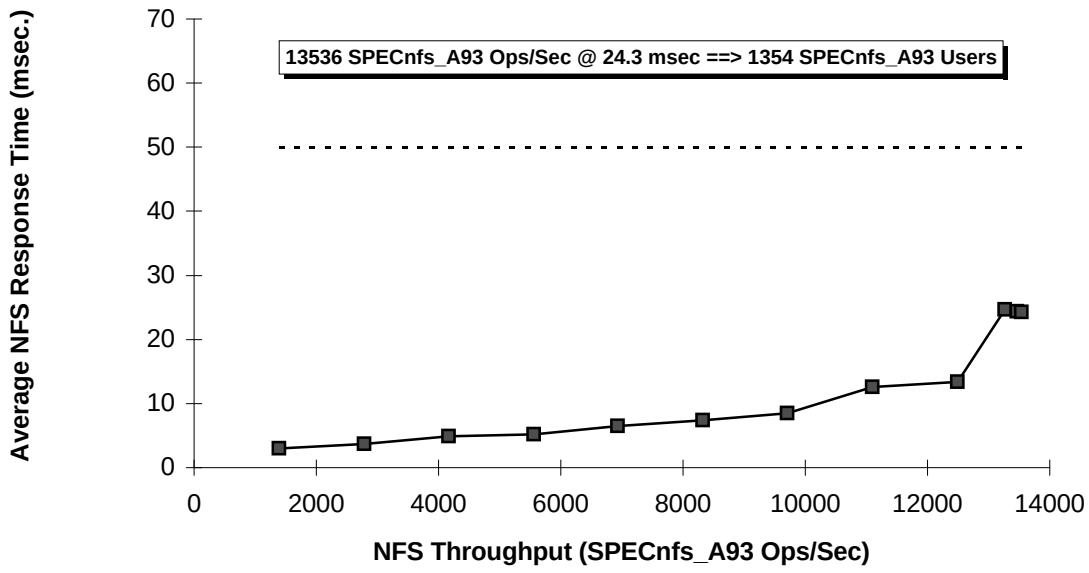
Server Tuning

(Also see Notes/Tuning below)

Buffer Cache Size	Dynamic
Num NFS Daemons	512
Fileset Size	97.1GB

NFS Throughput SPECnfs_A93 Ops/Sec	Avg. Response Time (NFS) Milliseconds
1391	3.0
2782	3.7
4172	4.9
5557	5.2
6936	6.5
8320	7.4
9702	8.5
11098	12.6
12491	13.4
13272	24.7
13465	24.4
13536	24.3

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
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	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,F13,...,F229	default
2	LG1	N1	F2,F14,...,F230	default
3	LG1	N2	F3,F15,...,F231	default
4	LG1	N2	F4,F16,...,F232	default
5	LG1	N3	F5,F17,...,F233	default
6	LG1	N3	F6,F18,...,F234	default
7	LG1	N4	F7,F19,...,F235	default
8	LG1	N4	F8,F20,...,F236	default
9	LG1	N5	F9,F21,...,F237	default
10	LG1	N5	F10,F22,...,F238	default
11	LG1	N6	F11,F23,...,F239	default
12	LG1	N6	F12,F24,...,F240	default

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