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

Sun Microsystems Inc.
Sun Enterprise 4002

Server Hardware

CPU, Memory, & Power

Model No.	Sun Enterprise 4002/12
CPU	336MHz UltraSPARC II
# of CPUs	12
Primary Cache	16KBI+16KBD on chip
Secondary Cache	4096KB(I+D) off chip
Other Cache	None
Memory	6GB
UPS	None
Other hardware	SunSwitch

Server Software

OS Version	Solaris 2.5.1
Other software	None
File system	UFS

Load Generators (LGs)

Number of Load Generators:	24
Processes Per Load Generator:	10
Biod_Max_Reads:	3
Biod_Max_Writes:	5

Disk Subsystem & Filesystems

(Full Configuration on Side 2)

Num Disk Controllers	9
Num Disks	244
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

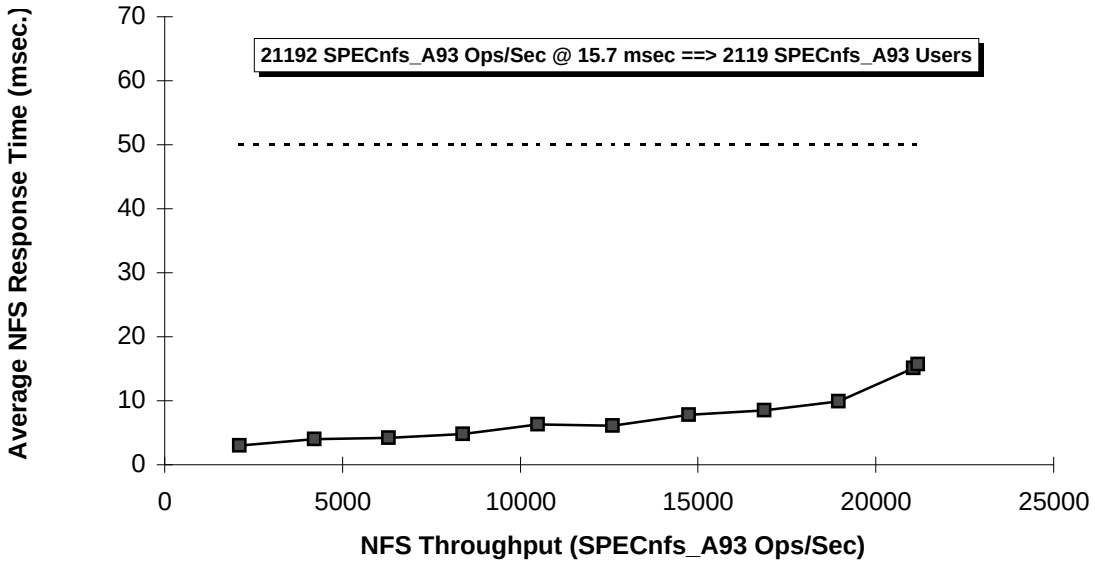
(Also see Notes/Tuning below)

Buffer Cache Size	Dynamic
Num NFS Daemons	479
Fileset Size	110.2GB

NFS Throughput SPECnfs_A93 Ops/Sec	Avg. Response Time (NFS) Milliseconds
2099	3.0
4204	4.0
6293	4.2
8387	4.8
10489	6.3
12604	6.1
14746	7.8
16866	8.5
18958	9.9
21062	15.1
21192	15.7

Hardware Availability: Mar-98 **Software Availability:** May-96

License #: 6 **Tested:** Feb-98 **By:** Sun **Of:** Mountain View



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

IGNORE_KERNEL_PREEMPTION=1
ncsize=524288
bufhwm=1048576

SSA fast_write enabled

Only 100baseT ports of SunSwitch are used

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

Sun Microsystems Inc.
Sun Enterprise 4002

Detailed Server Description

Network Subsystem

1 Sun FastEthernet (N1): 4 LGs
1 Sun FastEthernet (N2): 4 LGs
1 Sun FastEthernet (N3): 4 LGs
1 Sun FastEthernet (N4): 4 LGs
1 Sun FastEthernet (N5): 4 LGs
1 Sun FastEthernet (N6): 4 LGs

Disk Subsystem & Filesystems

Controller 1: On-board SCSI-2
Disks: 4 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	128MB	Solaris 2.6	SC3.0

Testbed Configuration

Load Gen. #	*Load Gen. Type*	*Network*	*Target File Systems*	*Notes*
1,2	LG1	N1	F1,..,F217/F2,..,F218	default
3,4	LG1	N1	F3,..,F219/F4,..,F220	default
5,6	LG1	N2	F5,..,F221/F6,..,F222	default
7,8	LG1	N2	F7,..,F223/F8,..,F224	default
9,10	LG1	N3	F9,..,F225/F10,..,F226	default
11,12	LG1	N3	F11,..,F227/F12,..,F228	default
13,14	LG1	N4	F13,..,F229/F14,..,F230	default
15,16	LG1	N4	F15,..,F231/F16,..,F232	default
17,18	LG1	N5	F17,..,F233/F18,..,F234	default
19,20	LG1	N5	F19,..,F235/F20,..,F236	default
21,22	LG1	N6	F21,..,F237/F22,..,F238	default
23,24	LG1	N6	F23,..,F239/F24,..,F240	default

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