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

Sun Microsystems Inc.

SPARCcenter 2000 (8 CPUs @ 50MHz)

NFS Throughput SPECnfs_A93 Ops/Sec	Avg. NFS Response Time Milliseconds
318	14.3
632	16.1
958	18.5
1276	19.6
1602	20.7
1927	23.1
2250	26.0
2581	28.8
2898	32.7
3189	42.7
3221	49.2
3242	49.4

Server Hardware

CPU, Memory, & Power

Model No.	SPARCcenter 2000
File Processor	50 MHz SuperSPARC
Number of FPs	8
Metadata Cache	20KBI+16KBD on chip
Other Cache	2MB(I+D) off chip
Host Processor	None
Memory	1GB
UPS	None
Other hardware	None

Disk Subsystem & Filesystems

(Full Configuration on Side 2)

Num Disk Controllers	12
Num Disks	72
Num File Systems	66

Network Subsystem

(Full Configuration On Side 2)

Num Net Controllers	4
Num Networks	16
Type Network	Ethernet

Server Software

OS Version	Solaris 2.4
Other software	None
File system	UFS

Server Tuning

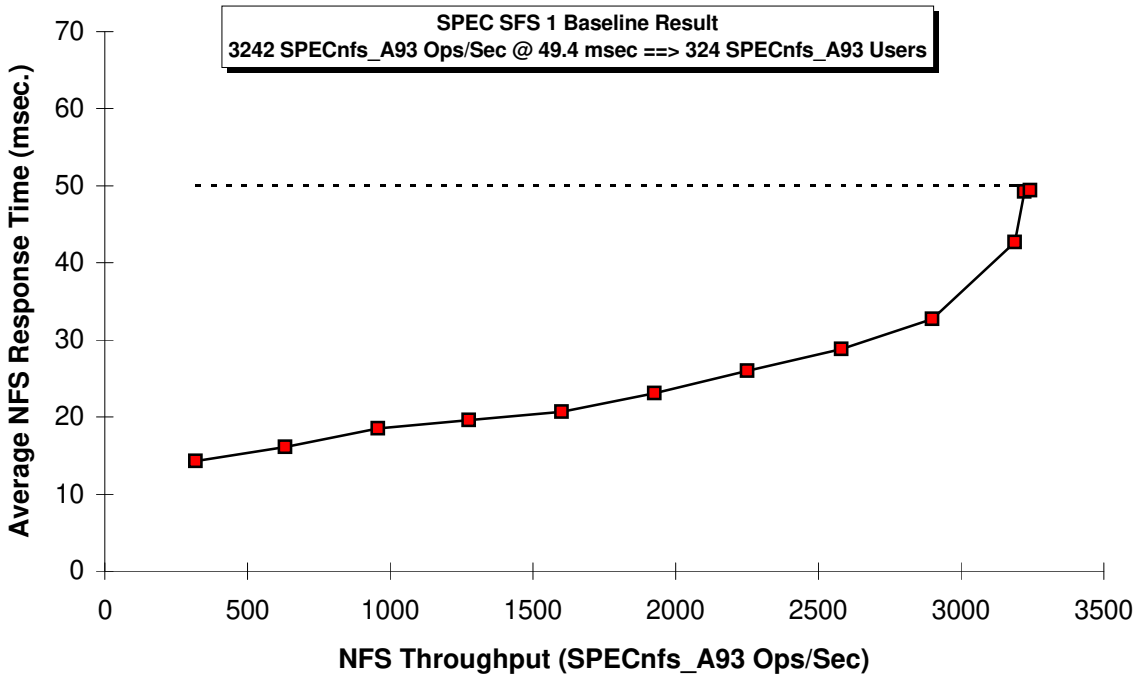
(Also see Notes/Tuning below)

Buffer Cache Size	Dynamic
Num NFS Daemons	300
Fileset Size	19.9GB

Load Generators (LGs)

Number of Load Generators:	32
Processes Per Load Generator:	4
Biod_Max_Reads:	2
Biod_Max_Writes:	3

Hardware Availability:	Nov-93		**Software Availability:**	Aug-94	
License #:	6	**Tested:**	Aug-94	**By:** Sun	**Of:** Mountain View, CA



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

maxusers=32 ufs_ninode=64000
ncsize=64000 bufhwm=35000
autoup=600 tune_t_fsflushr=600
IGNORE_KERNEL_PREEMPTION=1 npts=8192

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

Sun Microsystems Inc.

SPARCcenter 2000 (8 CPUs @ 50MHz)

Detailed Server Description

Network Subsystem

4 SBus Quad Ethernet Controller (SQEC)
16 ethernets (N1-N16): 2 LGs each

Disk Subsystem & Filesystems

All disks: Sun 2.1 GB
Controller 1: SBus Fast Diff SCSI-2/Buffered Ethernet Card
Disk 67: OS, code, swap (two file systems)
Disks 68-72: unused
Controller 2-12: SBus Diff/Fast/Wide Intelligent SCSI-2 HA
Controller 2: Disks 1-6, F1-F6
Controller 3: Disks 7-12, F7-F12
Controller 4: Disks 13-18, F13-F18
Controller 5: Disks 19-24, F19-F24
Controller 6: Disks 25-30, F25-F30
Controller 7: Disks 31-36, F31-F36
Controller 8: Disks 37-42, F37-F42
Controller 9: Disks 43-48, F43-F48
Controller 10: Disks 49-54, F49-F54
Controller 11: Disks 55-60, F55-F60
Controller 12: Disks 61-64, F61-F64 Disks 65-66: unused

Detailed Load Generator (LG) Description

Load Generator Type: LG1

Model:	SPARCstation 2
# of CPUs:	1
Main Mem	32MB
OS:	SunOS 4.1.3
Compiler:	/bin/cc

Load Generator Type: LG2

Model:	SPARCstation IPX
# of CPUs:	1
Main Mem	32MB
OS:	SunOS 4.1.3
Compiler:	/bin/cc

Load Generator Type: LG3

Model:	SPARCclassic
# of CPUs:	1
Main Mem	32MB
OS:	SunOS 4.1.3
Compiler:	/bin/cc

Load Generator Type: LG4

Model:	SPARCstation 10-41
# of CPUs:	1
Main Mem	32MB
OS:	SunOS 4.1.3
Compiler:	/bin/cc

Testbed Configuration

Load Generator Number	Load Generator Type	Network	Target Filesystems	Filesystem Mount Options
1/17	LG1/LG1	N1/N9	F1,F7,F13,F19	Default
2/18	LG1/LG2	N1/N9	F25,F31,F37,F43	Default
3/19	LG1/LG3	N2/N10	F49,F55,F61,F2	Default
4/20	LG1/LG1	N2/N10	F8,F14,F20,F26	Default
5/21	LG1/LG1	N3/N11	F32,F38,F44,F50	Default
6/22	LG1/LG4	N3/N11	F56,F62,F3,F9	Default
7/23	LG1/LG1	N4/N12	F15,F21,F27,F33	Default
8/24	LG1/LG3	N4/N12	F39,F45,F51,F57	Default
9/25	LG1/LG4	N5/N13	F63,F4,F10,F16	Default
10/26	LG1/LG3	N5/N13	F22,F28,F34,F40	Default
11/27	LG1/LG3	N6/N14	F46,F52,F58,F64	Default
12/28	LG1/LG3	N6/N14	F5,F11,F17,F23	Default

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

The adb tool was used to enable UDP checksumming on the load generators.

```
adb -w /vmunix /dev/kmem
udp_cksum?W1
udp_cksum/W1
```


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