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

Falcon Systems
FastfilePro

Server Hardware

CPU, Memory, & Power

Model No.	FF9410A
CPU	100MHz Pentium
# of CPUs	1
Primary Cache	8KBI+8KBD on chip
Secondary Cache	512KB(I+D) off chip
Other Cache	None
Memory	128MB
UPS	None
Other hardware	FDDI/CDDI

Server Software

OS Version	Falcon AerReal 3.2a
Other software	AerReal Logical Volume Mgr.
File system	JAS

Load Generators (LGs)

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

Disk Subsystem & Filesystems

(Full Configuration on Side 2)

Num Disk Controllers	2
Num Disks	42
Num File Systems	8

Network Subsystem

(Full Configuration On Side 2)

Num Net Controllers	1
Num Networks	1 (N1)
Type Network	FDDI/CDDI

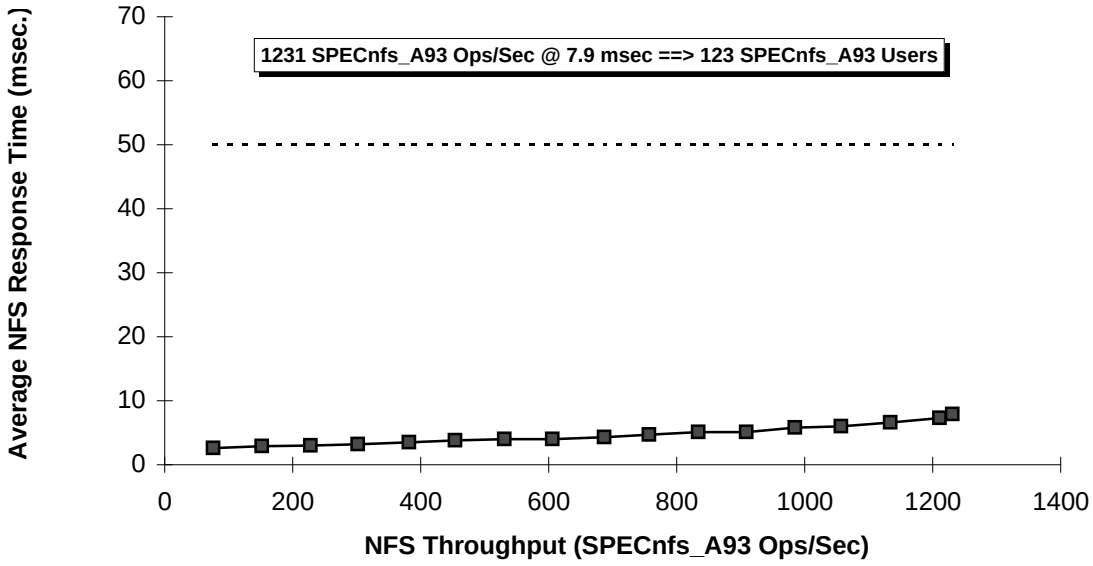
Server Tuning

(Also see Notes/Tuning below)

Buffer Cache Size	Dynamic
Num NFS Daemons	40
Fileset Size	7.8GB

NFS Throughput SPECnfs_A93 Ops/Sec	Avg. Response Time (NFS) Milliseconds
76	2.6
152	2.9
228	3.0
302	3.2
382	3.5
454	3.8
531	4.0
606	4.0
687	4.3
757	4.7
834	5.1
909	5.1
985	5.8
1057	6.0
1134	6.6
1211	7.3
1231	7.9

Hardware Availability:	Jan-96			**Software Availability:**	Dec-95		
License #:	950	**Tested:**	Jan-96	**By:**	Falcon Syster	**Of:**	Sacramento, CA



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

The following command was placed in the CONFIG.NCF file:

=sfs_nra=0

The number of NFS Daemons was increased using:

set nfs_worker 40 savevars

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

adb -w /vmunix /dev/kmem

udp_cksum/W1

udp_cksum?W1

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

Falcon Systems FastfilePro

Detailed Server Description

Network Subsystem

DEC PCI FDDI/CDDI Adapter

1 FDDI/CDDI Net (N1): 2 LGs per Net

Disk Subsystem & Filesystems

Controller 1: Adaptec 3940W PCI Dual Channel Wide SCSI Disk Controller
Disks: 1 Boot Disk - Conner 1GB
1 Non-Volatile Solid State Disk - Imperial MegaRam 500

Controller 2: Mylex DAC960PD-3 PCI Three Channel SCSI RAID Controller with 4MB RAM and BBU
Disks: 20 Seagate Barracuda 4GB
Contents: F1,F3,F5,F7 (Each RAID 5, 4 Data disks and 1 Parity disk distributed across all three drive channels)

Controller 3: Mylex DAC960PD-3 PCI Three Channel SCSI RAID Controller with 4MB RAM and BBU
Disks: 20 Seagate Barracuda 4GB
Contents: F2,F4,F6,F8 (Each RAID 5, 4 Data disks and 1 Parity disk distributed across all three drive channels)

Detailed Load Generator (LG) Description

Load Gen. Type	*Model*	*# of CPUs*	*RAM*	*OS*	*Compiler*
LG1	Sun SPARCstation 20	2	80MB	SunOS 4.1.3	/bin/cc

Testbed Configuration

Load Gen. #	*Load Gen. Type*	*Network*	*Target File Systems*	*Notes*
1	LG1	N1	F1-F4	
2	LG1	N1	F5-F8	

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