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

Network Appliance

F330

Server Hardware

CPU, Memory, & Power

Model No.	F330-64-2N-2D2
CPU	90MHz Pentium
# of CPUs	1
Primary Cache	8KBI+8KBD on chip
Secondary Cache	512KB(I+D) off chip
Other Cache	8MB NVRAM
Memory	256MB
UPS	None
Other hardware	FDDI

Server Software

OS Version	FAServer Software 3.0 Beta
Other software	None
File system	WAFL

Load Generators (LGs)

Number of Load Generators:	6
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	14
Num File Systems	1

Network Subsystem

(Full Configuration On Side 2)

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

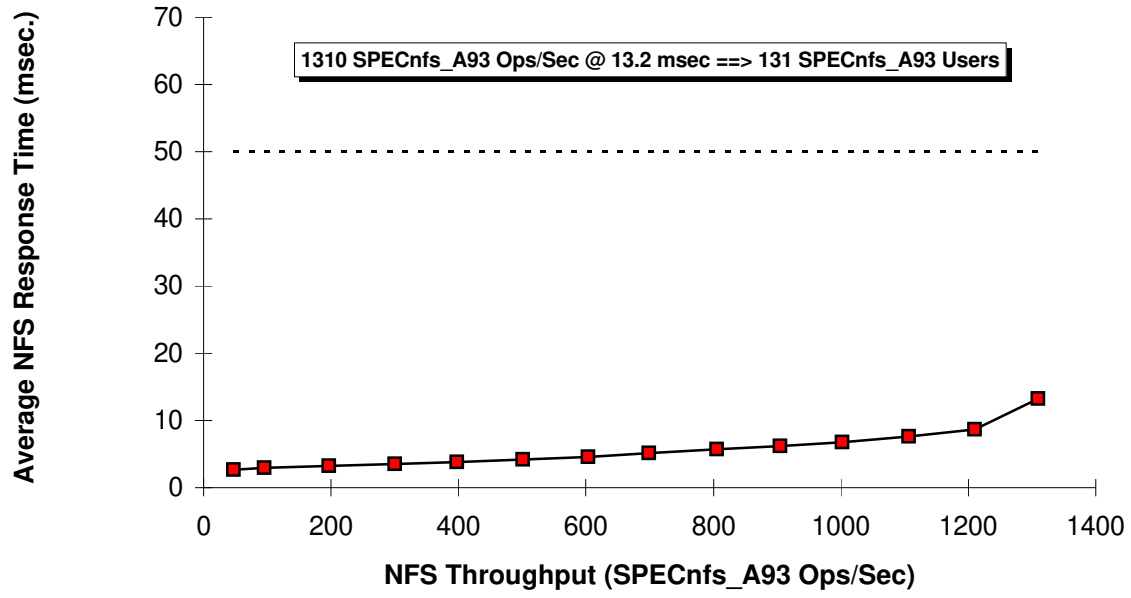
Server Tuning

(Also see Notes/Tuning below)

Buffer Cache Size	Dynamic
Num NFS Daemons	See Notes
Fileset Size	6.7GB

NFS Throughput SPECnfs_A93 Ops/Sec	Avg. Response Time (NFS) Milliseconds
47	2.7
95	3.0
197	3.2
300	3.5
398	3.8
501	4.2
604	4.6
699	5.1
805	5.7
905	6.2
1002	6.8
1107	7.6
1210	8.7
1310	13.2

Hardware Availability:	Sep-95			**Software Availability:**	Sep-95		
License #:	33	**Tested:**	Aug-95	**By:**	NAC	**Of:**	Mountain View, CA



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

The FAServer uses RAID to combine all of its disks into a single large file system. It uses a real-time embedded kernel that processes NFS requests right from the network layer without any NFS daemons. It uses non-volatile RAM to improve NFS performance.

To run the SFS benchmark, configure the FAServer by adding this line to /etc/rc:

options minra 1 nosnap 1 nosnapdir 1

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

adb -w -k /vmunix /dev/mem

udp_cksum?W1 udp_cksum/W1

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

Network Appliance

F330

Detailed Server Description

Network Subsystem

X1102 (SA TP) MLT3 FDDI Adapter
1 MLT3 FDDI (N1): 6 LGs per Net

Disk Subsystem & Filesystems

Controller 1: On-board Fast SCSI
Disks: 7 SCSI X204 2 GB (5 + 2 disks incl in bundled system)
Controller 2: X2001 Fast Dual SCSI (one channel used)
(Controller 2 included in bundled system)
Disks: 1 X206 (7 SCSI X204 2 GB in rack)
Contents: F1 (RAID 4: 13 Data Disks and 1 Parity Disk)

Detailed Load Generator (LG) Description

Load Gen. Type	*Model*	*# of CPUs*	*RAM*	*OS*	*Compiler*
LG1	Axil Model 311	1	32MB	SunOS 4.1.3	/bin/cc

Testbed Configuration

Load Gen. #	*Load Gen. Type*	*Network*	*Target File Systems*	*Notes*
1,2,3,4,5,6	LG1	N1	F1	Default

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

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