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

Invincible Technologies Corporation
LIFELINE Information Server 275

Server Hardware

CPU, Memory, & Power

Model No.	LIFELINE L275R
CPU	275MHz Alpha
# of CPUs	1
Primary Cache	16KBI+16KBD on chip
Secondary Cache	2MB(I+D) off chip
Other Cache	32MB NVRAM RAID Cache Per controller
Memory	512MB
UPS	None
Other hardware	None

Server Software

OS Version	Digital UNIX 3.2D
Other software	MEDS
File system	UFS

Load Generators (LGs)

Number of Load Generators:	3
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	37
Num File Systems	12 (F1 - F12)

Network Subsystem

(Full Configuration On Side 2)

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

Server Tuning

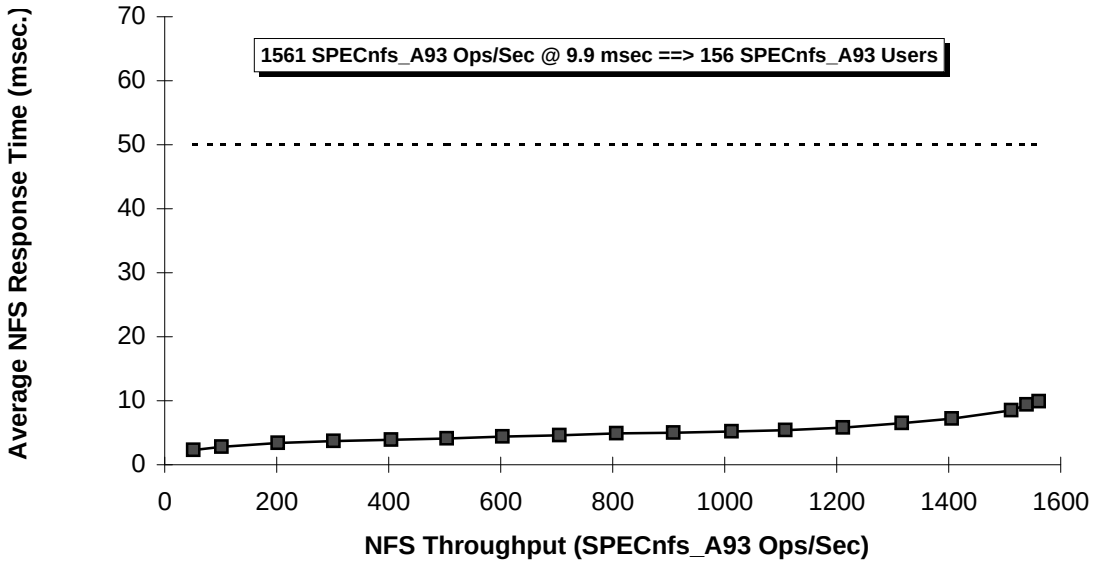
(Also see Notes/Tuning below)

Buffer Cache Size	Dynamic (UBC Cache)
Num NFS Daemons	64
Fileset Size	8.1 GB

NFS Throughput SPECnfs_A93 Ops/Sec	Avg. Response Time (NFS) Milliseconds
51	2.3
102	2.8
202	3.4
302	3.7
404	3.9
504	4.1
603	4.4
705	4.6
807	4.9
908	5.0
1012	5.2
1108	5.4
1211	5.8
1317	6.5
1406	7.2
1512	8.5
1539	9.4
1561	9.9

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

License #: 984 **Tested:** Jun-96 **By:** ITC **Of:** Medway, MA



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

bufcache: 10%
ubcbuffers: 1024
maxusers: 1024
ubc-maxdirtywrites: 100
prmetaonly: 1
vnode_age: 600
vnode_dealloc_enable: 0
ufs_disable_reada: 1

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

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Detailed Server Description

Network Subsystem

1 FDDI Dual Attached Station on the Server
1 FDDI Dual Attached Station in each of the 3 LGs

Disk Subsystem & Filesystems

Controller 1: PCI Fast/Wide/Differential SCSI controller
Disks: 1 Individual Disk
Contents: OS, page space
Disks: 3 RAID 5 arrays (RAID Array controller #1)
Contents: F1-F3
Disks: 3 RAID 5 arrays (RAID Array controller #2)
Contents: F4-F6
Controller 2: PCI Fast/Wide/Differential SCSI controller
Disks: 3 RAID 5 arrays (RAID Array controller #1)
Contents: F7-F9
Disks: 3 RAID 5 arrays (RAID Array controller #2)
Contents: F10-F12

Each controller is attached to a LIFELINE External RAID Storage Each LIFELINE External RAID Storage Array contains two array controllers. All disks are RAID 5 arrays of 3 4.1 GB disk drives

Detailed Load Generator (LG) Description

Load Gen. Type	*Model*	*# of CPUs*	*RAM*	*OS*	*Compiler*
LG1	ITC LIFELINE L275P	1	64MB	Digital UNIX V3.2D	cc

Testbed Configuration

Load Gen. #	*Load Gen. Type*	*Network*	*Target File Systems*	*Notes*
1	LG1	N1	F1,F4,F7,F10	nfsv2
2	LG1	N1	F2,F5,F8,F11	nfsv2
3	LG1	N1	F3,F6,F9,F12	nfsv2

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

lad_sync: 1