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

Hewlett-Packard Company
HP Series 9000/V2250 Enterprise Server

Server Hardware

CPU, Memory, & Power

Model No.	V2250
CPU	240 MHz PA-Risc 8200
# of CPUs	8
Primary Cache	2MBI+2MBD off chip
Secondary Cache	None
Other Cache	None
Memory	4GB
UPS	None
Other hardware	ODS Optical Concentrators (6)

Server Software

OS Version	HP-UX 11.00 Extension Pack 9812 64-bit
Other software	None
File system	VXFS

Load Generators (LGs)

Number of Load Generators:	20
Processes Per Load Generator:	6
Biod_Max_Reads:	2
Biod_Max_Writes:	2

Disk Subsystem & Filesystems

(Full Configuration on Side 2)

Num Disk Controllers	6
Num Disks	127
Num File Systems	120

Network Subsystem

(Full Configuration On Side 2)

Num Net Controllers	10
Num Networks	10
Type Network	FDDI

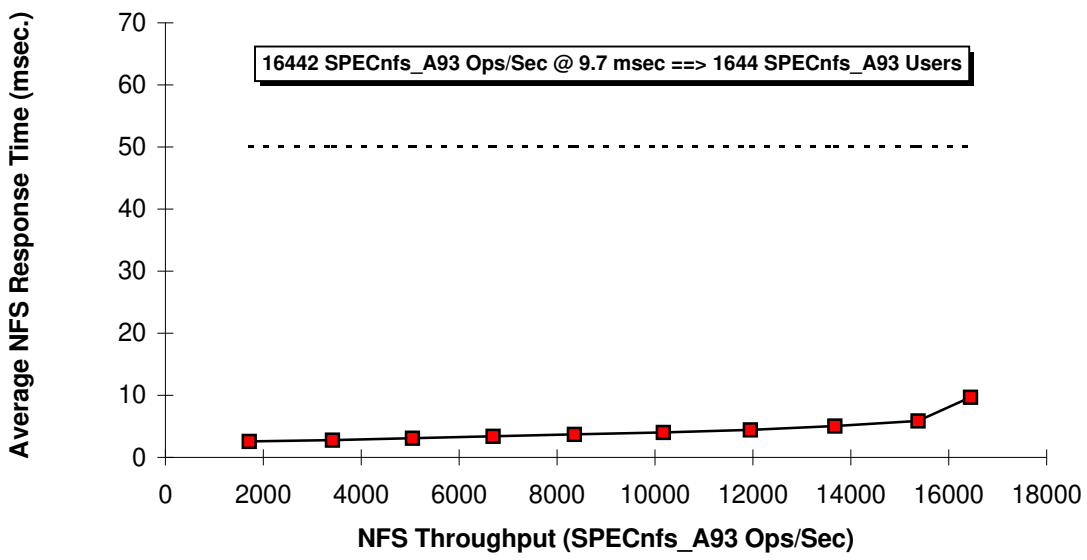
Server Tuning

(Also see Notes/Tuning below)

Buffer Cache Size	Dynamic
Num NFS Daemons	180
Fileset Size	95.2GB

NFS Throughput SPECnfs_A93 Ops/Sec	Avg. Response Time (NFS) Milliseconds
1718	2.6
3406	2.8
5047	3.1
6693	3.4
8352	3.7
10172	4.0
11944	4.4
13667	5.1
15371	5.9
16442	9.7

Hardware Availability:	Mar-98			**Software Availability:**	Dec-98		
License #:	3	**Tested:**	Jun-98	**By:**	HP	**Of:**	Cupertino, CA



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

Server's HP-UX Kernel Parameters:

ninode 400000
nfile 3000
maxswapchunks 32768
dbc_max_pct 50
eqmemsize 100

The adb tool was used to turn off disk i/o statistics:

adb -w /stand/vmunix /dev/kmem km_disable/w 1

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Detailed Server Description

Network Subsystem

PCI FDDI Adapter A3739A (N1): 2 LGs ODS Concentrator
PCI FDDI Adapter A3739A (N2): 2 LGs ODS Concentrator
PCI FDDI Adapter A3739A (N3): 2 LGs ODS Concentrator
PCI FDDI Adapter A3739A (N4): 2 LGs ODS Concentrator
PCI FDDI Adapter A3739A (N5): 2 LGs ODS Concentrator
PCI FDDI Adapter A3739A (N6): 2 LGs ODS Concentrator
PCI FDDI Adapter A3739A (N7): 2 LGs Dual attach FDDI
PCI FDDI Adapter A3739A (N8): 2 LGs Dual attach FDDI
PCI FDDI Adapter A3739A (N9): 2 LGs Dual attach FDDI
PCI FDDI Adapter A3739A (N10):2 LGs Dual attach FDDI

Disk Subsystem & Filesystems

Controller 1: PCI Ultra Wide SCSI-2 A4800A
Disks: 7 SCSI C2490WD 2GB
Contents: OS, page space, dump

Controllers 2 - 6: PCI FiberChannel 1062 Mb/s Shortwave Adapter A3740A
20 HP Disk Array AutoRAID Model 12H (A3700A) with
FC Mux (A3308A) & 96MB
6 Logical Drives (LUNs) striped 2GB across 12 4GB 7200rpm drives/array
Contents 2: F1,F6,...,F116
Contents 3: F2,F7,...,F117
Contents 4: F3,F8,...,F118
Contents 5: F4,F9,...,F119
Contents 6: F5,F10,..,F120

Detailed Load Generator (LG) Description

Load Gen. Type	*Model*	*# of CPUs*	*RAM*	*OS*	*Compiler*
	HP 9000/735	1	96MB	HP-UX 10.20	HP 92453-01 A.10.32.00 HP C
	HP B160	1	128MB	HP-UX 10.20	HP 92453-01 A.10.32.03 HP C

Testbed Configuration

Load Gen. #	*Load Gen. Type*	*Network*	*Target File Systems*	*Notes*
1,2	LG1	N1	F1,...,F101/F2,...F102	default
3,4	LG1	N2	F3,...,F103/F4,...F104	default
5,6	LG1	N3	F5,...,F105/F6,...F106	default
7,8	LG1	N4	F7,...,F107/F8,...F108	default
9,10	LG1	N5	F9,...,F109/F10,..F110	default
11,12	LG1	N6	F11,..,F111/F12,..F112	default
13,14	LG2	N7	F13,..,F113/F14,..F114	default
15,16	LG2	N8	F15,..,F115/F16,..F116	default
17,18	LG2	N9	F17,..,F117/F18,..F118	default
19,20	LG2	N10	F19,..,F119/F20,..F120	default

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

no