SPECsfs97 Result

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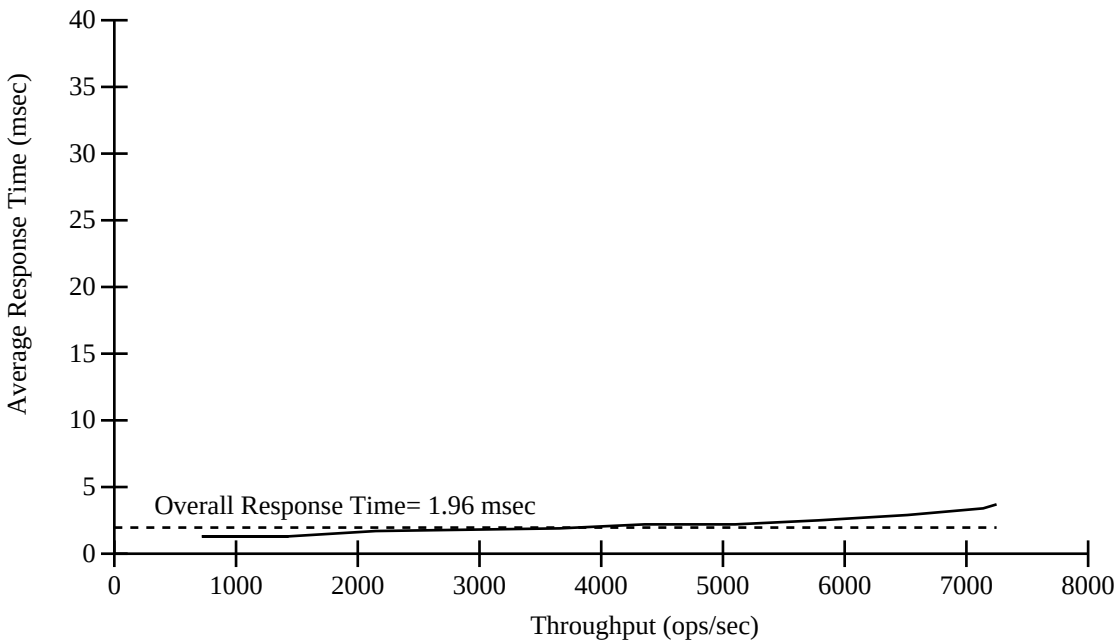
Network Appliance, Inc.
NetApp F740 Failover Cluster (UDP, 28x36GB FCAL, 2xGbE)

SPECsfs97.v3 =

7248 Ops/Sec (Overall Response Time = 1.96 msec)

Tested:	January 2001	By:	Network Appliance, Inc.	License #:	33	Hardware Avail:	December 2000	Software Avail:	December 2000

Throughput (ops/sec)	Average Response (msec)
719	1.3
1429	1.3
2148	1.7
2905	1.8
3658	1.9
4356	2.2
5100	2.2
5782	2.5
6514	2.9
7138	3.4
7248	**3.7**



A line in your configuration is too long
or you have too many lines.
Please fix the problem and try again

Server Tuning

Buffer Cache Size:	default
# NFS Processes:	N/A
Fileset Size:	71.4 GB

Disk Subsystem

Number Disk Controllers:	4
Number of Disks:	28
Number of Filesystems:	2
File System Creation Ops:	default
File System Config:	1 RAID-group, 13 disks
Disk Controller:	X2030B FC-AL adapter card (64 KB RAM standard)
# of Controller Type:	4
Number of Disks:	7,7/7,7
Disk Type:	X231A 36GB 10000RPM FC-AL
File Systems on Disks:	F1/F2
Special Config Notes:	2 primary controllers, 2 secondaries (see notes)

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Load Generator (LG) Configuration

Number of Load Generators:	6
Number of Processes per LG:	4
Biod Max Read Setting:	2
Biod Max Write Setting:	2
LG Type:	LG1
LG Model:	Intel ISP1100 Internet Server Platform
Number and Type Processors:	1x700-MHz Pentium III
Memory Size:	512 MB
Operating System:	Linux 2.2.14-5.0 (Red Hat 6.2)
Compiler:	egcs-2.91.66
Compiler Options:	-g -DNO_T_TYPES -DUSE_INTTYPES
Network Type:	integrated Intel Pro/100+ 100BASE-T

Testbed Configuration

LG #	LG Type	Network	Target File Systems	Notes
1/2/../6	LG1	N1	F1,F2	N/A

Notes/Tuning Information

Other Notes
-NetApp's embedded operating system processes NFS requests from the network layer without any NFS daemons, and uses non-volatile memory to improve performance.
-The tested system was a failover cluster comprised of two nodes joined by a cluster interconnect.
-The cluster option was licensed and enabled.
-Each node was the owner of one filesystem, but the disks were dual-attached so that, in the event of a fault, they could be controlled by the other node via a secondary loop.
-The F1 filesystem was on the primary disk controller of the first node. The F2 filesystem was on the primary disk controller of the second node.
-Each filesystem was composed of one RAID-4 group with 12 data disks and 1 parity disk. Two spare disks were present.
-Server tunings:
-options minra 1 -- minimize file read-ahead
-date 0801 -- set clock to 8:01am for reproducibility
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