SPECsfs97 Result

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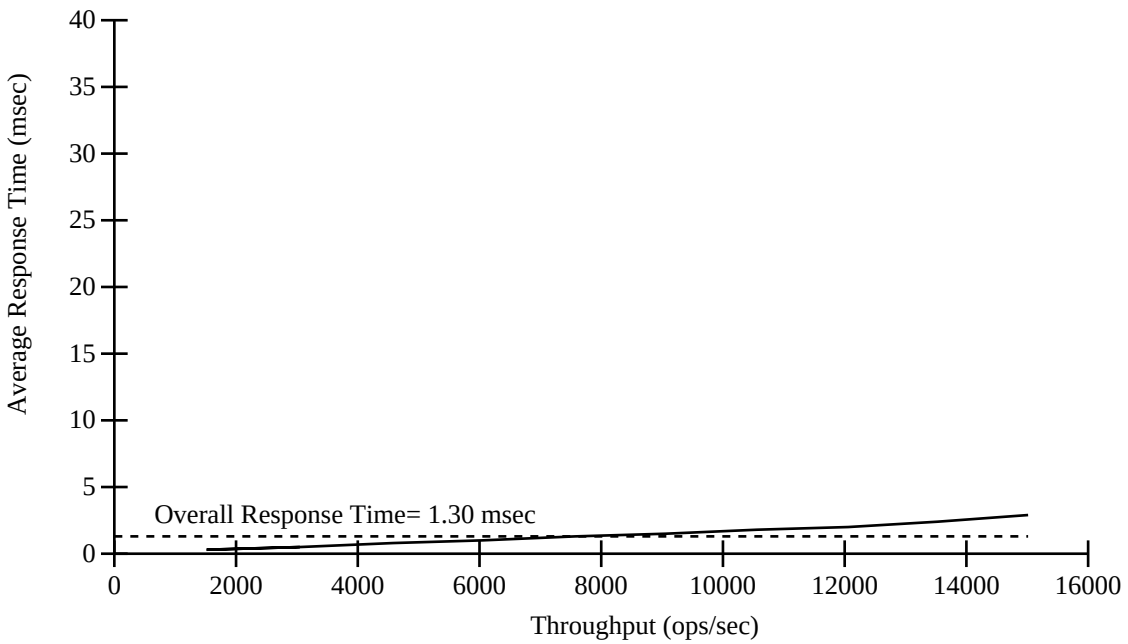
Exacube Systems Inc.
Netbine500

SPECsfs97_R1.v3 =

15014 Ops/Sec (Overall Response Time = 1.30 msec)

Tested:	Oct 2004	By:	Exacube Systems Inc.	License #:	2978	Hardware Avail:	Jan 2004	Software Avail:	Jan 2004

Throughput (ops/sec)	Average Response (msec)
1517	0.3
3048	0.5
4584	0.8
6043	1.0
7577	1.3
9061	1.5
10561	1.8
12058	2.0
13525	2.4
15014	**2.9**



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

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Load Generator (LG) Configuration

Number of Load Generators:	2
Number of Processes per LG:	20
Biod Max Read Setting:	2
Biod Max Write Setting:	2
LG Type:	LG1
LG Model:	Intel SR2200
Number and Type Processors:	2 x Pentium III 1.0 Ghz
Memory Size:	512 MB
Operating System:	Linux RedHat 9.0
Compiler:	gcc 3.2.2
Compiler Options:	default
Network Type:	Intel PRO/1000 1000BASE-T

Testbed Configuration

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

Notes/Tuning Information

Other Notes
-We set NFS share access through insecure port larger than 1024.
-RAID controller's disk cache size is 512MB (Disk cache can be extended to 1) (GB).
-NVRAM: Each RAID controller has 512 MB of write-back cache (72 hours) (battery-backed).
-Each NAS server and RAID was connected with 2 ports through 2 Gbps FC link.
-Netbine500 has two RAID controllers, which were configured active-standby failover.
-The RAID is configured with 2 LUNs. Each LUN has 6 disks with RAID level 5 and the stripe size is 128 KB.
-Each NAS server has onboard Adaptec U320 SCSI controller for OS disks.
-Two OS disks in a NAS server are mirrored with software RAID 1 for failure protection.
-Uniform Access Rules:
-Each node has 1 network port(N1) for NFS service connected with the LGs.
-Each node has 1 network port(N2) for cluster operation connected with each node in the cluster.
-There are two LUNs in the RAID. A file system consists of one LUN.
-Each LG has 20 processes and the 10 processes access F1 via active server and the other 10 processes access F2.
-Stable Storage:
-There is an integral UPS for each NAS server, which guarantees sufficient power in the event of power failure.
-The irrecoverable power failure detected by UPS, the active NAS server flushes all data safely and shutdown to failover.
-Buffer cache mirroring are performed between active node and standby node to prevent data loss in buffer cache.
-If active node fails in H/W, OS or some media, the standby node takes over all services and data without any loss.
-When the cluster is recovered, all written data in buffer cache are flushed and cache mirroring is started.