SPECsfs97 Result

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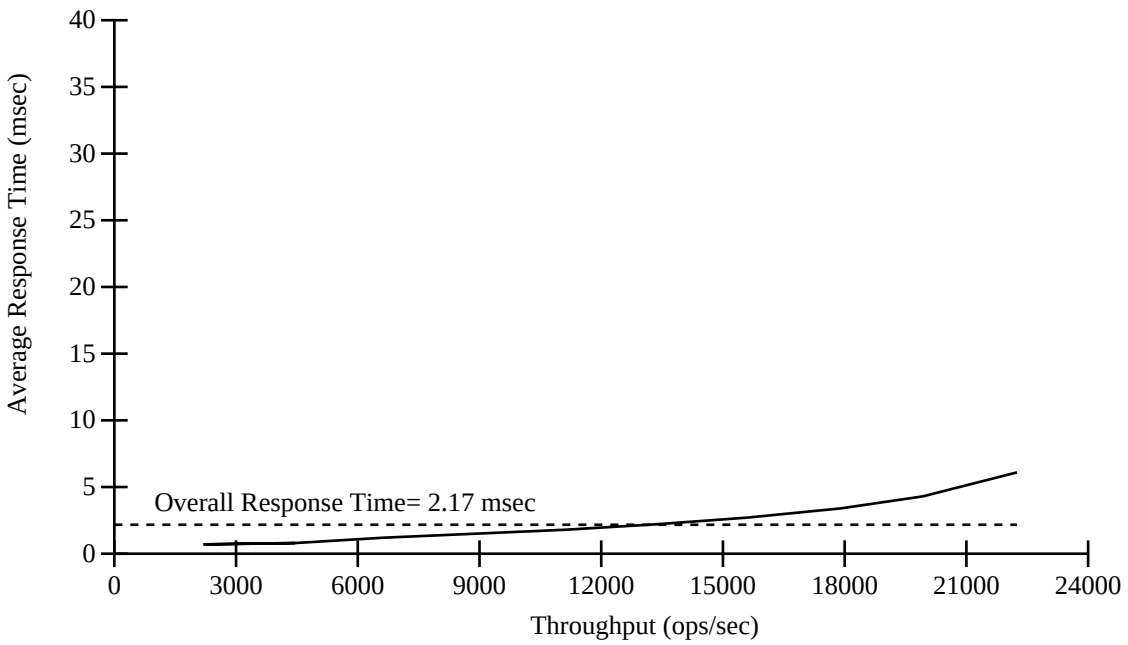
EMC Corp.
EMC Celerra NS20 Multi-protocol Storage

SPECsfs97_R1.v3 =
22248 Ops/Sec (Overall Response Time = 2.17 msec)

Tested: November 2007	By: EMC Corp.	License #: 47	Hardware Avail: November 2007	Software Avail: September 2007

Throughput (ops/sec)	Average Response (msec)
2200	0.7
4459	0.8
6631	1.2
8896	1.5
11135	1.8
13321	2.2
15573	2.7
17908	3.4
19929	4.3
22248	**6.1**



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:	15
Number of Processes per LG:	10
Biod Max Read Setting:	5
Biod Max Write Setting:	5
LG Type:	LG1
LG Model:	Dell PowerEdge 1850
Number and Type Processors:	2 x 3 GHz Intel P4 Xeon
Memory Size:	2 GB
Operating System:	Linux 2.6.9-11.ELsmp
Compiler:	GCC 3.4.3
Compiler Options:	None
Network Type:	Intel Corporation 82541GI/PI Gigabit Ethernet Controller (rev 05)

Testbed Configuration

LG #	LG Type	Network	Target File Systems	Notes
1..15	LG1	1	/fs1	N/A

Notes/Tuning Information

Other Notes
-Server tuning:
-param ufs inoBlkHashSize=170669 (inode block hash size)
-param ufs inoHashTableSize=1218761 (inode hash table size)
-param ufs updateAccTime=0 (disable access-time updates)
-param nfs withoutCollector=1 (enable NFS-to-CPU thread affinity)
-param file asyncthreshold=8 (maximum number of blocks cached by NFSv3 async) (writes)
-param file prefetch=0 (disable DART read prefetch)
-param kernel maxStrToBeProc=16 (no. of network streams to process at once)
-param kernel outerLoop=8 (8 consecutive iterations of network packets) (processing)
-param kernel buffersWatermarkPercentage=5 (flushing buffer cache threshold)
-file initialize nodes=1000000 dnlc=1656000 (no. of inodes, no. of dirctory) (name lookup cache entries)
-nfs start openfiles=980462 nfsd=4 (no. of open files and 4 NFS daemons)
-
-Storage array notes:
-The integrated CX3-10 used for storage exposes LUNs across multiple Fibre
ports.
-Each LUN is configured 4+1 RAID 5 on 5 physical drives. Each LUN is 534 GB in
size,
-except for the LUN on the first five disks, which is 372 GB.
-There are 2 fibre ports which connect each NAS X-blade to the X-Blade of
-CX3-10 SPs (1 connection per CX3-10 SP). Each of the 2 CX3-10 blades has 1 GB
-of memory. 278 MB write cache was configured per SP pair. The write cache is
-mirrored between the CX3-10 SP's. 32 MB read cache was configured on each
-CX3-10 blade.
-
-The memory is backed up with sufficient battery power to safely destage all
-data in the write cache to the disk in the event of a power failure.