SPECsfs97 Result

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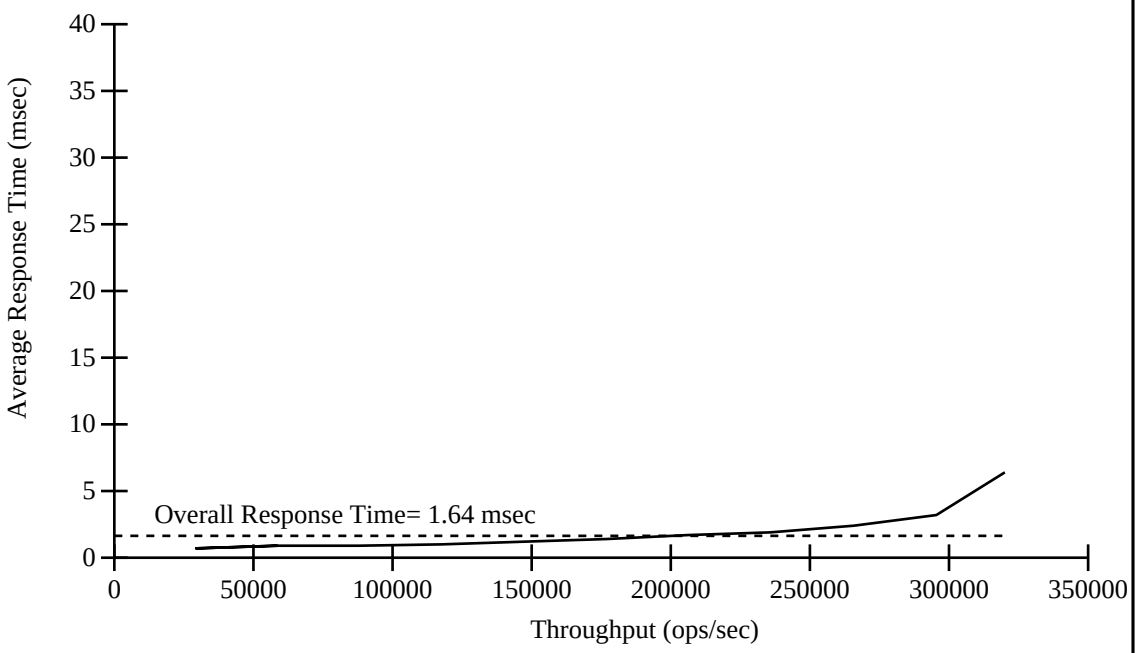
EMC Corp.
Celerra NSX Cluster 8 X-Blade 60 (1 stdby) 2 DMX

SPECsfs97_R1.v3 =
320064 Ops/Sec (Overall Response Time = 1.64 msec)

Tested:	April 2005	By:	EMC Corp.	License #:	47	Hardware Avail:	May 2005	Software Avail:	May 2005

Throughput (ops/sec)	Average Response (msec)
29173	0.7
58639	0.9
87839	0.9
117556	1.0
146884	1.2
176884	1.4
206359	1.7
235798	1.9
265739	2.4
295460	3.2
320064	**6.4**



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:	42
Number of Processes per LG:	42
Biod Max Read Setting:	5
Biod Max Write Setting:	5
LG Type:	LG1
LG Model:	Dell 1850
Number and Type Processors:	2 x 3.6 GHz Intel P4 Xeon
Memory Size:	1 GB
Operating System:	Linux 2.4.20-6smp
Compiler:	GCC 3.2.2
Compiler Options:	None
Network Type:	Dual embedded Intel Gigabit 82541 Server Adapter

Testbed Configuration

LG #	LG Type	Network	Target File Systems	Notes
1..42	LG1	1	/fs1../fs7	N/A

Notes/Tuning Information

Other Notes
-Failover is supported by an additional blade that operates in
-standby mode. In the event of any blade failure, this unit takes over the
-function of the failed unit. The standby blade does not contribute to
-the performance of the system and is not included in the processor, memory,
-or other components listed above.
-
-Server blade 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 prefetch=0 (disable DART read prefetch)
-param mkfsArgs dirType=DIR_COMPAT (Compatability mode directory style)
-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)
-param ufs nFlushCyl=32 (no. of UxFS cylinder group blocks flush threads)
-param ufs nFlushDir=32 (no. of UxFS directory and indirect blocks flush) (threads)
-param ufs nFlushIno=32 (no. of UxFS inode blocks flush threads)
-
-Storage array notes:
-The DMX2000 and DMX3000 used for storage expose LUNs across multiple Fibre
ports.
-Each file system is built on a stripe that spans 14386MB RAID-1 LUN.
-There are two disk controllers per blade, one port each. Each port is
-connected to one of the fibre channel switches so that each blade has one
-link per switch. Each link on each switch is zoned to four Symmetrix fibre
-channel directors (HBA) on each of the DMX systems with one HBA to one HBA
zone.
-Both DMX2000 and DMX3000 were configured with 128GB memory each.
-The memory is backed up with sufficient battery power to safely
-destage all cached data onto the disk in the event of a power failure.