422ST&410ST performance test report

Environment:

(1)Client PC 1:

M/B model:	ASUS M2NPV-VM
Host OS:	RED HAT Fedora core 7
Memory size:	480MB
NIC:	Intel 8257 network gigabit chip

(2)Client PC 2:

M/B model:	Intel server board S3000AH
Host OS:	RED HAT Fedora core 8
Memory size:	1GB
NIC:	Intel PRO/1000 PM network gigabit connection

(3)Manager PC:

M/B model:	Intel server board SE7520BD2
Host OS:	Windows 2003
Memory size:	512MB
NIC:	Marvel Yukon 88E8050 PCI-E ASF Ethernet gigabit controller

(4)HUB:

model:	BUFFALO LSW-GT-8W Gigabit Switching HUB

(5)NAS1:

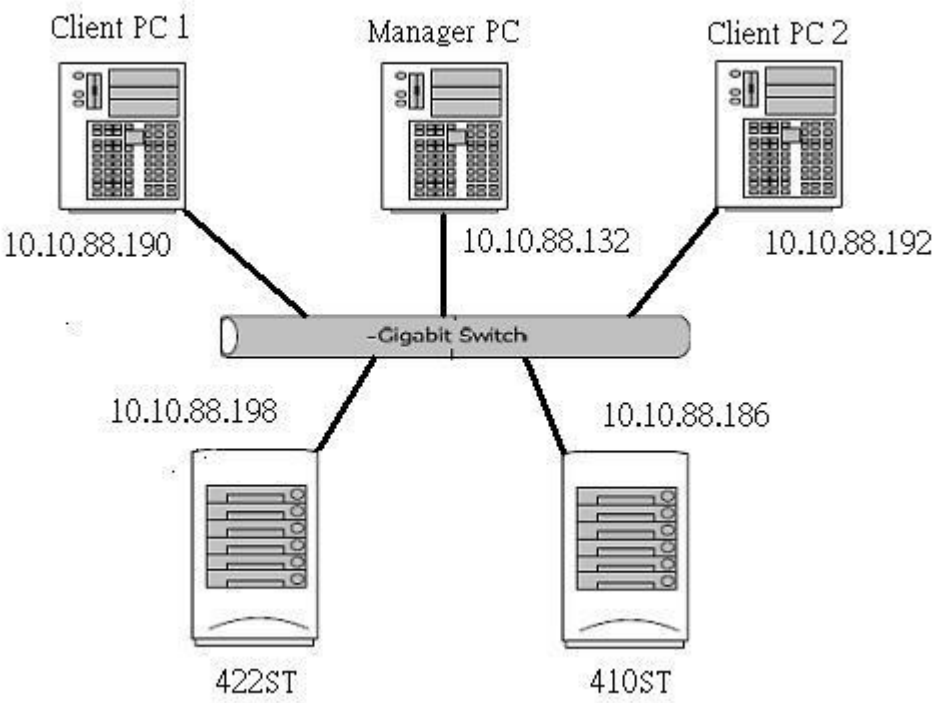
model:	422ST
Memory:	512MB
Firmware:	422ST_FW_PacBETA-8
HDD model:	WD2500YS-01SHB1
RAID Level:	RAID 5

(6)NAS2:

model:	410ST
Memory:	512MB

Firmware:	1.1L-20081223-Orion-410ST
HDD model:	WD2500YS-01SHB1
RAID Level:	RAID 5

Diagram:



Procedure:

Step1: Download IOmeter program

There are two major programs which need to install in client and manager PC. One is iometer-2006_07_27.linux.i386-bin.tgz for client PC 1&2 in Linux OS, the other is iometer-2006.07.27.win32.i386-setup.exe for manager PC in Windows OS.

Step2: Install iometer-2006.07.27.win32.i386-setup.exe program on manager PC, After install finished, and then executed it.

Click Start ---> All programes---> Iometer 2006.07.27---> Iometer

Step3: Install iometer-2006_07_27.linux.i386-bin.tgz program on client pc 1

& 2

[root@local ~]# tar -zxvf iometer-2006_07_27.linux.i386-bin.tgz

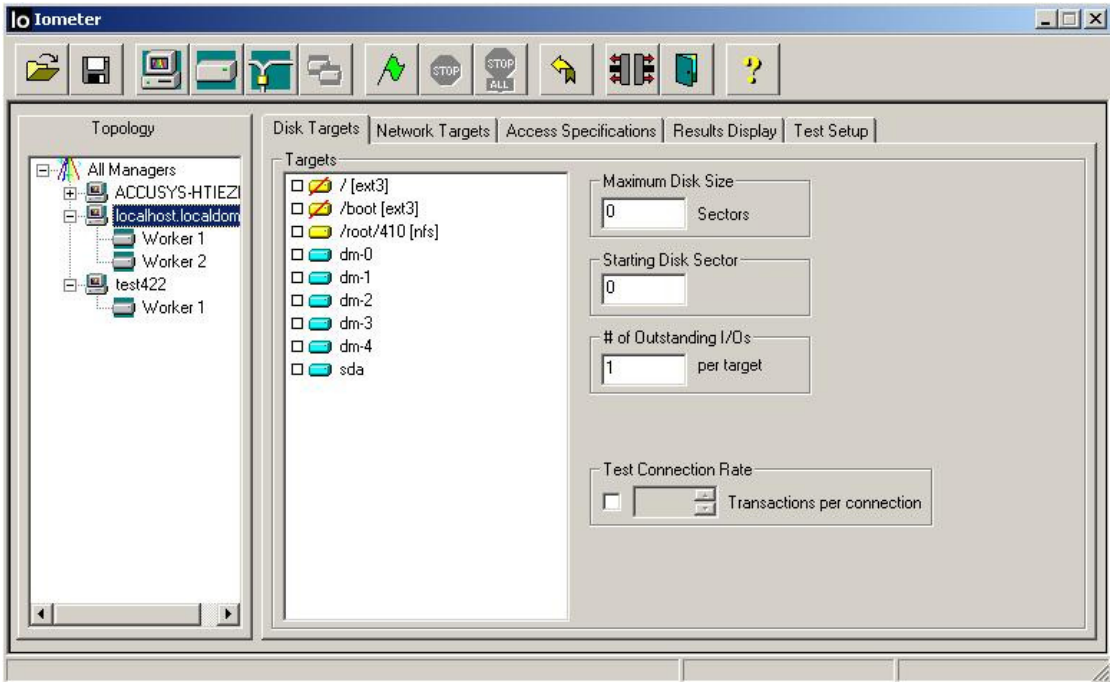
[root@local ~]# cd iometer-2006_07_27.linux.i386-bin/src

[root@localsrc]# dynamo -i manager_computer_name -m client_computer_name

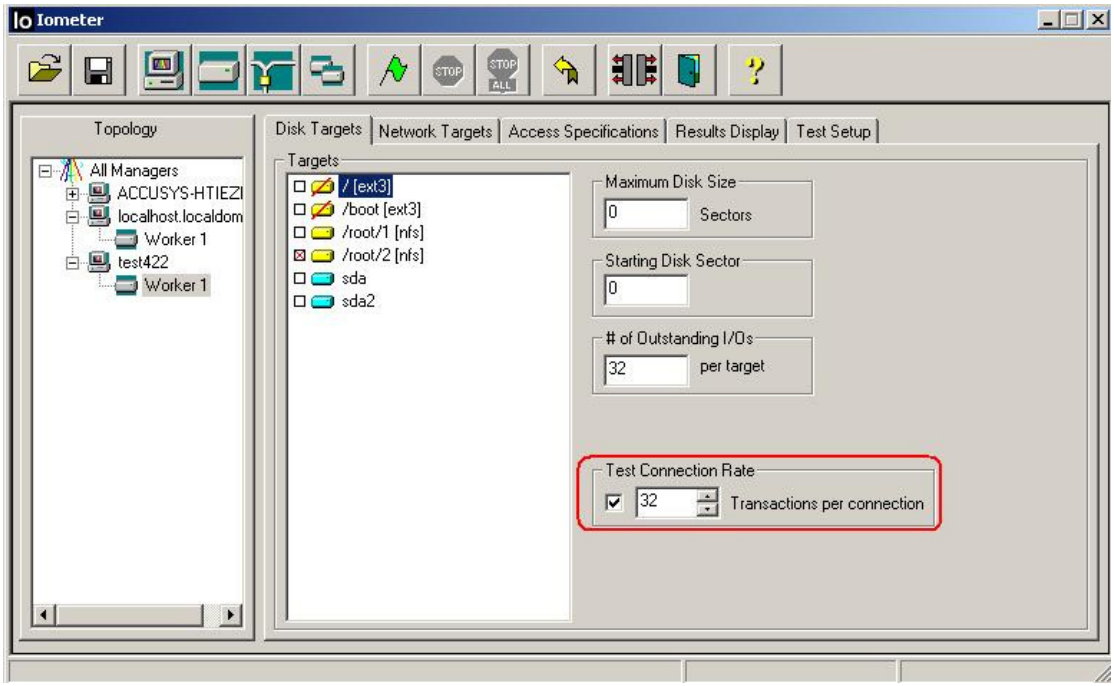
ex: client PC 1

[root@local ~]# dynamo -i 10.10.88.132 -m 10.10.88.190

Step4: Verify client PC 1&2 joined manager PC running IOmeter program



Step5: Set different parameter for testing



RESULT:

1. Transfer Request File: 256K Outstanding I/O: 16

model / Type		422ST			410ST		
		1 work*	5 works	10 works	1 work	5 works	10 works
Sequence Read	IOPS	455.75	443.08	444.05	152.07	150.86	152.89
	MB/s	113.94	110.77	111.01	38.02	37.71	38.22
Sequence Write	IOPS	357.44	425.26	421.12	146.73	156.08	155.55
	MB/s	89.36	106.31	105.28	36.68	39.02	38.89

***: work number per client**

2. Transfer Request File: 512K Outstanding I/O: 16

model / Type		422ST			410ST		
		1 work	5 works	10 works	1 work	5 works	10 works
Sequence Read	IOPS	218.64	222.70	224.35	75.55	74.80	75.51
	MB/s	109.32	111.35	112.17	37.76	37.40	37.76
Sequence Write	IOPS	176.52	207.74	215.88	75.76	78.84	76.13
	MB/s	88.26	103.87	107.94	37.88	39.42	38.06

3. Transfer Request File: 256K Outstanding I/O: 32

model / Type		422ST			410ST		
		1 work	5 works	10 works	1 work	5 works	10 works
Sequence Read	IOPS	396.74	442.33	445.85	151.51	154.12	153.20
	MB/s	99.18	110.58	111.46	37.88	38.53	38.30
Sequence Write	IOPS	301.28	431. 51	430.51	146.25	156.24	155.90
	MB/s	75.32	107.88	107.63	36.56	39.06	38.98

4. Transfer Request File: 512K Outstanding I/O: 32

model / Type		422ST			410ST		
		1 work	5 works	10 works	1 work	5 works	10 works
Sequence Read	IOPS	216.10	222.33	222.10	76.19	75.14	75.31
	MB/s	108.05	111.17	111.05	38.09	37.57	37.65
Sequence Write	IOPS	156.43	209.57	221.02	75.76	79.48	78.44
	MB/s	78.22	104.78	110.51	37.88	39.74	39.22