

Your performance WILL vary, results provided as is with NO warranties or responsibility for or how used or their impact!

Worker count = 1

1/11/2015

Note: High IO rates/transfers at 100% seq, 100% read may be locality of reference of drive level cache

STX ST4000DM000 3.5" 7.2K 4TB (External Raw LSI SAS HBA)

Offset: 64KB

Test / Step information section					Reads			Writes			Totals (R+W)		Overall Averages (R+W)		
IO Size	Test Step	Pattern	Total Run Time Sec (with pauses)	Test Time Sec	Total Reads	Total Read KB	Avg Read Resp	Total Writes	Total Write KB	Avg Write Resp	Total IO (R+W)	Total KB (R+W)	STX ST4000DM0 7.2K 4TB Avg Resp (R+W)	STX ST4000DM0 7.2K 4TB IOP Sec (R+W)	STX ST4000DM000 3.5" SATA 7.2K 4TB KB Sec (R+W)
4KB	1	100% Seq 100% Read	480	300	12,213,005	48,852,020	0.02	-	-	-	12,213,005	48,852,020	0.02	40,710	162,840
4KB	2	60% Seq 100% Read	480	300	65,350	261,400.0	4.6	-	-	-	65,350	261,400.0	4.6	217	871
4KB	3	30% Seq 100% Read	480	300	37,379	149,516.0	8.0	-	-	-	37,379	149,516.0	8.0	124	498
4KB	4	0% Seq 100% Read	480	300	26,642	106,568.0	11.3	-	-	-	26,642	106,568.0	11.3	88	355
4KB	5	100% Seq 60% Read	480	300	35,142	140,568.0	0.0	23,026	92,104.0	13.0	58,168	232,672.0	5.2	193	775
4KB	6	60% Seq 60% Read	480	300	23,031	92,124.0	4.7	15,286	61,144.0	12.5	38,317	153,268.0	7.8	127	510
4KB	7	30% Seq 60% Read	480	300	18,114	72,456.0	8.0	11,935	47,740.0	12.9	30,049	120,196.0	10.0	100	400
4KB	8	0% Seq 60% Read	480	300	15,240	60,960.0	11.3	10,025	40,100.0	12.7	25,265	101,060.0	11.9	84	336
4KB	9	100% Seq 30% Read	480	300	11,963	47,852.0	0.0	27,851	111,404.0	10.8	39,814	159,256.0	7.5	132	530
4KB	10	60% Seq 30% Read	480	300	9,023	36,092.0	4.8	20,707	82,828.0	12.4	29,730	118,920.0	10.1	99	396
4KB	11	30% Seq 30% Read	480	300	7,755	31,020.0	8.2	18,494	73,976.0	12.8	26,249	104,996.0	11.4	87	349
4KB	12	0% Seq 30% Read	480	300	7,255	29,020.0	11.3	17,166	68,664.0	12.7	24,421	97,684.0	12.3	81	325
4KB	13	100% Seq 0% Read	480	300	-	-	-	28,350	113,400.0	10.6	28,350	113,400.0	10.6	94	378
4KB	14	60% Seq 0% Read	480	300	-	-	-	25,027	100,108.0	12.0	25,027	100,108.0	12.0	83	333
4KB	15	30% Seq 0% Read	480	300	-	-	-	23,954	95,816.0	12.5	23,954	95,816.0	12.5	79	319
4KB	16	0% Seq 0% Read	480	300	-	-	-	23,693	94,772.0	12.7	23,693	94,772.0	12.7	78	315

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STX ST4000DM000 3.5" 7.2K 4TB (External Raw LSI SAS HBA)

Test / Step information section					Reads			Writes			Totals (R+W)		Overall Averages (R+W)		
IO Size	Test Step	Pattern	Total Run Time Sec (with pauses)	Test Time Sec	Total Reads	Total Read KB	Avg Read Resp	Total Writes	Total Write KB	Avg Write Resp	Total IO (R+W)	Total KB (R+W)	STX ST4000DM0 7.2K 4TB Avg Resp (R+W)	STX ST4000DM0 7.2K 4TB IOP Sec (R+W)	STX ST4000DM000 3.5" SATA 7.2K 4TB KB Sec (R+W)
8KB	17	100% Seq 100% Read	480	300	6,253,056	50,024,448	0.05	-	-	-	6,253,056	50,024,448	0.05	20,843	166,748
8KB	18	60% Seq 100% Read	480	300	65,097	520,776.0	4.6	-	-	-	65,097	520,776.0	4.6	216	1,735
8KB	19	30% Seq 100% Read	480	300	37,622	300,976.0	8.0	-	-	-	37,622	300,976.0	8.0	125	1,003
8KB	20	0% Seq 100% Read	480	300	26,527	212,216.0	11.3	-	-	-	26,527	212,216.0	11.3	88	707
8KB	21	100% Seq 60% Read	480	300	41,257	330,056.0	0.0	27,556	220,448.0	10.9	68,813	550,504.0	4.4	229	1,835
8KB	22	60% Seq 60% Read	480	300	23,022	184,176.0	4.7	15,339	122,712.0	12.4	38,361	306,888.0	7.8	127	1,022
8KB	23	30% Seq 60% Read	480	300	17,657	141,256.0	8.1	12,070	96,560.0	13.0	29,727	237,816.0	10.1	99	792
8KB	24	0% Seq 60% Read	480	300	15,266	122,128.0	11.3	10,061	80,488.0	12.7	25,327	202,616.0	11.8	84	675
8KB	25	100% Seq 30% Read	480	300	11,890	95,120.0	0.0	28,288	226,304.0	10.6	40,178	321,424.0	7.5	133	1,071
8KB	26	60% Seq 30% Read	480	300	8,902	71,216.0	4.7	20,959	167,672.0	12.3	29,861	238,888.0	10.0	99	796
8KB	27	30% Seq 30% Read	480	300	7,869	62,952.0	8.1	18,671	149,368.0	12.7	26,540	212,320.0	11.3	88	707
8KB	28	0% Seq 30% Read	480	300	7,225	57,800.0	11.3	17,093	136,744.0	12.8	24,318	194,544.0	12.3	81	648
8KB	29	100% Seq 0% Read	480	300	-	-	-	28,275	226,200.0	10.6	28,275	226,200.0	10.6	94	754
8KB	30	60% Seq 0% Read	480	300	-	-	-	25,074	200,592.0	12.0	25,074	200,592.0	12.0	83	668
8KB	31	30% Seq 0% Read	480	300	-	-	-	23,222	185,776.0	12.9	23,222	185,776.0	12.9	77	619
8KB	32	0% Seq 0% Read	480	300	-	-	-	23,633	189,064.0	12.7	23,633	189,064.0	12.7	78	630

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STX ST4000DM000 3.5" 7.2K 4TB (External Raw LSI SAS HBA)

Test / Step information section					Reads			Writes			Totals (R+W)		Overall Averages (R+W)		
IO Size	Test Step	Pattern	Total Run Time Sec (with pauses)	Test Time Sec	Total Reads	Total Read KB	Avg Read Resp	Total Writes	Total Write KB	Avg Write Resp	Total IO (R+W)	Total KB (R+W)	STX ST4000DM0 7.2K 4TB Avg Resp (R+W)	STX ST4000DM0 7.2K 4TB IOP Sec (R+W)	STX ST4000DM000 3.5" SATA 7.2K 4TB KB Sec (R+W)
16KB	33	100% Seq 100% Read	480	300	3,177,048	50,832,768	0.09	-	-	-	3,177,048	50,832,768	0.09	10,590	169,442
16KB	34	60% Seq 100% Read	480	300	63,770	1,020,320.0	4.7	-	-	-	63,770	1,020,320.0	4.7	212	3,401
16KB	35	30% Seq 100% Read	480	300	37,234	595,744.0	8.1	-	-	-	37,234	595,744.0	8.1	124	1,985
16KB	36	0% Seq 100% Read	480	300	26,375	422,000.0	11.4	-	-	-	26,375	422,000.0	11.4	87	1,406
16KB	37	100% Seq 60% Read	480	300	40,578	649,248.0	0.0	27,305	436,880.0	11.0	67,883	1,086,128.0	4.4	226	3,620
16KB	38	60% Seq 60% Read	480	300	22,865	365,840.0	4.7	15,347	245,552.0	12.5	38,212	611,392.0	7.9	127	2,037
16KB	39	30% Seq 60% Read	480	300	17,924	286,784.0	8.0	11,998	191,968.0	13.0	29,922	478,752.0	10.0	99	1,595
16KB	40	0% Seq 60% Read	480	300	15,070	241,120.0	11.3	10,106	161,696.0	12.8	25,176	402,816.0	11.9	83	1,342
16KB	41	100% Seq 30% Read	480	300	11,969	191,504.0	0.0	27,978	447,648.0	10.7	39,947	639,152.0	7.5	133	2,130
16KB	42	60% Seq 30% Read	480	300	8,941	143,056.0	4.8	20,908	334,528.0	12.3	29,849	477,584.0	10.1	99	1,591
16KB	43	30% Seq 30% Read	480	300	7,908	126,528.0	8.1	18,609	297,744.0	12.7	26,517	424,272.0	11.3	88	1,414
16KB	44	0% Seq 30% Read	480	300	7,290	116,640.0	11.4	16,924	270,784.0	12.8	24,214	387,424.0	12.4	80	1,291
16KB	45	100% Seq 0% Read	480	300	-	-	-	28,383	454,128.0	10.6	28,383	454,128.0	10.6	94	1,513
16KB	46	60% Seq 0% Read	480	300	-	-	-	24,958	399,328.0	12.0	24,958	399,328.0	12.0	83	1,331
16KB	47	30% Seq 0% Read	480	300	-	-	-	23,796	380,736.0	12.6	23,796	380,736.0	12.6	79	1,269
16KB	48	0% Seq 0% Read	480	300	-	-	-	23,499	375,984.0	12.8	23,499	375,984.0	12.8	78	1,253

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STX ST4000DM000 3.5" 7.2K 4TB (External Raw LSI SAS HBA)

Test / Step information section					Reads			Writes			Totals (R+W)		Overall Averages (R+W)		
IO Size	Test Step	Pattern	Total Run Time Sec (with pauses)	Test Time Sec	Total Reads	Total Read KB	Avg Read Resp	Total Writes	Total Write KB	Avg Write Resp	Total IO (R+W)	Total KB (R+W)	STX ST4000DM0 7.2K 4TB Avg Resp (R+W)	STX ST4000DM0 7.2K 4TB IOP Sec (R+W)	STX ST4000DM000 3.5" SATA 7.2K 4TB KB Sec (R+W)
32KB	49	100% Seq 100% Read	480	300	1,598,368	51,147,776	0.19	-	-	-	1,598,368	51,147,776	0.19	5,327	170,492
32KB	50	60% Seq 100% Read	480	300	60,621	1,939,872.0	5.0	-	-	-	60,621	1,939,872.0	5.0	202	6,466
32KB	51	30% Seq 100% Read	480	300	36,718	1,174,976.0	8.2	-	-	-	36,718	1,174,976.0	8.2	122	3,916
32KB	52	0% Seq 100% Read	480	300	26,113	835,616.0	11.5	-	-	-	26,113	835,616.0	11.5	87	2,785
32KB	53	100% Seq 60% Read	480	300	39,254	1,256,128.0	0.1	26,302	841,664.0	11.3	65,556	2,097,792.0	4.6	218	6,992
32KB	54	60% Seq 60% Read	480	300	22,490	719,680.0	4.8	15,002	480,064.0	12.8	37,492	1,199,744.0	8.0	124	3,999
32KB	55	30% Seq 60% Read	480	300	17,861	571,552.0	8.1	12,005	384,160.0	13.0	29,866	955,712.0	10.0	99	3,185
32KB	56	0% Seq 60% Read	480	300	14,928	477,696.0	11.5	9,924	317,568.0	13.0	24,852	795,264.0	12.1	82	2,650
32KB	57	100% Seq 30% Read	480	300	11,795	377,440.0	0.0	27,967	894,944.0	10.7	39,762	1,272,384.0	7.5	132	4,241
32KB	58	60% Seq 30% Read	480	300	8,706	278,592.0	4.8	20,056	641,792.0	12.9	28,762	920,384.0	10.4	95	3,067
32KB	59	30% Seq 30% Read	480	300	7,990	255,680.0	8.1	18,550	593,600.0	12.7	26,540	849,280.0	11.3	88	2,830
32KB	60	0% Seq 30% Read	480	300	7,146	228,672.0	11.5	16,842	538,944.0	12.9	23,988	767,616.0	12.5	79	2,558
32KB	61	100% Seq 0% Read	480	300	-	-	-	28,573	914,336.0	10.5	28,573	914,336.0	10.5	95	3,047
32KB	62	60% Seq 0% Read	480	300	-	-	-	24,363	779,616.0	12.3	24,363	779,616.0	12.3	81	2,598
32KB	63	30% Seq 0% Read	480	300	-	-	-	23,830	762,560.0	12.6	23,830	762,560.0	12.6	79	2,541
32KB	64	0% Seq 0% Read	480	300	-	-	-	23,240	743,680.0	12.9	23,240	743,680.0	12.9	77	2,478

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STX ST4000DM000 3.5" 7.2K 4TB (External Raw LSI SAS HBA)

Test / Step information section					Reads			Writes			Totals (R+W)		Overall Averages (R+W)		
IO Size	Test Step	Pattern	Total Run Time Sec (with pauses)	Test Time Sec	Total Reads	Total Read KB	Avg Read Resp	Total Writes	Total Write KB	Avg Write Resp	Total IO (R+W)	Total KB (R+W)	STX ST4000DM0 7.2K 4TB Avg Resp (R+W)	STX ST4000DM0 7.2K 4TB IOP Sec (R+W)	STX ST4000DM000 3.5" SATA 7.2K 4TB KB Sec (R+W)
64KB	65	100% Seq 100% Read	480	300	796,262	50,960,768	0.38	-	-	-	796,262	50,960,768	0.38	2,654	169,869
64KB	66	60% Seq 100% Read	480	300	53,585	3,429,440.0	5.6	-	-	-	53,585	3,429,440.0	5.6	178	11,431
64KB	67	30% Seq 100% Read	480	300	35,389	2,264,896.0	8.5	-	-	-	35,389	2,264,896.0	8.5	117	7,549
64KB	68	0% Seq 100% Read	480	300	25,728	1,646,592.0	11.7	-	-	-	25,728	1,646,592.0	11.7	85	5,488
64KB	69	100% Seq 60% Read	480	300	37,656	2,409,984.0	0.2	25,252	1,616,128.0	11.6	62,908	4,026,112.0	4.8	209	13,420
64KB	70	60% Seq 60% Read	480	300	21,132	1,352,448.0	5.1	14,241	911,424.0	13.6	35,373	2,263,872.0	8.5	117	7,546
64KB	71	30% Seq 60% Read	480	300	17,016	1,089,024.0	8.4	11,406	729,984.0	13.7	28,422	1,819,008.0	10.6	94	6,063
64KB	72	0% Seq 60% Read	480	300	14,708	941,312.0	11.7	9,628	616,192.0	13.3	24,336	1,557,504.0	12.3	81	5,191
64KB	73	100% Seq 30% Read	480	300	11,881	760,384.0	0.1	27,392	1,753,088.0	10.9	39,273	2,513,472.0	7.6	130	8,378
64KB	74	60% Seq 30% Read	480	300	8,889	568,896.0	4.7	20,607	1,318,848.0	12.5	29,496	1,887,744.0	10.2	98	6,292
64KB	75	30% Seq 30% Read	480	300	7,576	484,864.0	8.5	17,367	1,111,488.0	13.6	24,943	1,596,352.0	12.0	83	5,321
64KB	76	0% Seq 30% Read	480	300	6,921	442,944.0	11.7	16,557	1,059,648.0	13.2	23,478	1,502,592.0	12.8	78	5,008
64KB	77	100% Seq 0% Read	480	300	-	-	-	28,295	1,810,880.0	10.6	28,295	1,810,880.0	10.6	94	6,036
64KB	78	60% Seq 0% Read	480	300	-	-	-	24,613	1,575,232.0	12.2	24,613	1,575,232.0	12.2	82	5,250
64KB	79	30% Seq 0% Read	480	300	-	-	-	22,948	1,468,672.0	13.1	22,948	1,468,672.0	13.1	76	4,895
64KB	80	0% Seq 0% Read	480	300	-	-	-	22,740	1,455,360.0	13.2	22,740	1,455,360.0	13.2	75	4,851

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IO Size	Test Step	Pattern	Total Run Time Sec (with pauses)	Test Time Sec	Total Reads	Total Read KB	Avg Read Resp	Total Writes	Total Write KB	Avg Write Resp	Total IO (R+W)	Total KB (R+W)	STX ST4000DM0 7.2K 4TB Avg Resp (R+W)	STX ST4000DM0 7.2K 4TB IOP Sec (R+W)	STX ST4000DM000 3.5" SATA 7.2K 4TB KB Sec (R+W)
128KB	81	100% Seq 100% Read	480	300	407,457	52,154,496	0.73	-	-	-	407,457	52,154,496	0.73	1,358	173,848
128KB	82	60% Seq 100% Read	480	300	42,182	5,399,296.0	7.1	-	-	-	42,182	5,399,296.0	7.1	140	17,997
128KB	83	30% Seq 100% Read	480	300	32,299	4,134,272.0	9.3	-	-	-	32,299	4,134,272.0	9.3	107	13,780
128KB	84	0% Seq 100% Read	480	300	24,928	3,190,784.0	12.0	-	-	-	24,928	3,190,784.0	12.0	83	10,635
128KB	85	100% Seq 60% Read	480	300	32,184	4,119,552.0	1.0	21,486	2,750,208.0	12.5	53,670	6,869,760.0	5.6	178	22,899
128KB	86	60% Seq 60% Read	480	300	19,651	2,515,328.0	5.6	13,379	1,712,512.0	14.2	33,030	4,227,840.0	9.1	110	14,092
128KB	87	30% Seq 60% Read	480	300	16,239	2,078,592.0	8.9	10,971	1,404,288.0	14.2	27,210	3,482,880.0	11.0	90	11,609
128KB	88	0% Seq 60% Read	480	300	14,115	1,806,720.0	12.1	9,322	1,193,216.0	13.9	23,437	2,999,936.0	12.8	78	9,999
128KB	89	100% Seq 30% Read	480	300	10,864	1,390,592.0	0.5	25,394	3,250,432.0	11.6	36,258	4,641,024.0	8.3	120	15,470
128KB	90	60% Seq 30% Read	480	300	8,376	1,072,128.0	5.2	19,239	2,462,592.0	13.3	27,615	3,534,720.0	10.9	92	11,782
128KB	91	30% Seq 30% Read	480	300	7,240	926,720.0	8.8	16,808	2,151,424.0	14.1	24,048	3,078,144.0	12.5	80	10,260
128KB	92	0% Seq 30% Read	480	300	6,752	864,256.0	12.1	15,818	2,024,704.0	13.8	22,570	2,888,960.0	13.3	75	9,629
128KB	93	100% Seq 0% Read	480	300	-	-	-	27,822	3,561,216.0	10.8	27,822	3,561,216.0	10.8	92	11,870
128KB	94	60% Seq 0% Read	480	300	-	-	-	24,098	3,084,544.0	12.4	24,098	3,084,544.0	12.4	80	10,281
128KB	95	30% Seq 0% Read	480	300	-	-	-	22,492	2,878,976.0	13.3	22,492	2,878,976.0	13.3	74	9,596
128KB	96	0% Seq 0% Read	480	300	-	-	-	21,794	2,789,632.0	13.8	21,794	2,789,632.0	13.8	72	9,298

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Test / Step information section					Reads			Writes			Totals (R+W)		Overall Averages (R+W)		
IO Size	Test Step	Pattern	Total Run Time Sec (with pauses)	Test Time Sec	Total Reads	Total Read KB	Avg Read Resp	Total Writes	Total Write KB	Avg Write Resp	Total IO (R+W)	Total KB (R+W)	STX ST4000DM0 7.2K 4TB Avg Resp (R+W)	STX ST4000DM0 7.2K 4TB IOP Sec (R+W)	STX ST4000DM000 3.5" SATA 7.2K 4TB KB Sec (R+W)
256KB	97	100% Seq 100% Read	480	300	199,830	51,156,480	1.5	-	-	-	199,830	51,156,480	1.5	666	170,521
256KB	98	60% Seq 100% Read	480	300	34,139	8,739,584.0	8.8	-	-	-	34,139	8,739,584.0	8.8	113	29,131
256KB	99	30% Seq 100% Read	480	300	26,625	6,816,000.0	11.3	-	-	-	26,625	6,816,000.0	11.3	88	22,720
256KB	100	0% Seq 100% Read	480	300	22,631	5,793,536.0	13.3	-	-	-	22,631	5,793,536.0	13.3	75	19,311
256KB	101	100% Seq 60% Read	480	300	27,264	6,979,584.0	2.1	18,088	4,630,528.0	13.4	45,352	11,610,112.0	6.6	151	38,700
256KB	102	60% Seq 60% Read	480	300	17,019	4,356,864.0	7.5	11,062	2,831,872.0	15.7	28,081	7,188,736.0	10.7	93	23,962
256KB	103	30% Seq 60% Read	480	300	14,803	3,789,568.0	10.2	9,842	2,519,552.0	15.1	24,645	6,309,120.0	12.2	82	21,030
256KB	104	0% Seq 60% Read	480	300	12,772	3,269,632.0	13.1	8,775	2,246,400.0	15.1	21,547	5,516,032.0	13.9	71	18,386
256KB	105	100% Seq 30% Read	480	300	9,802	2,509,312.0	2.2	23,040	5,898,240.0	12.1	32,842	8,407,552.0	9.1	109	28,025
256KB	106	60% Seq 30% Read	480	300	7,607	1,947,392.0	6.8	17,542	4,490,752.0	14.1	25,149	6,438,144.0	11.9	83	21,460
256KB	107	30% Seq 30% Read	480	300	6,687	1,711,872.0	9.9	15,602	3,994,112.0	15.0	22,289	5,705,984.0	13.5	74	19,019
256KB	108	0% Seq 30% Read	480	300	6,225	1,593,600.0	12.9	14,649	3,750,144.0	15.0	20,874	5,343,744.0	14.4	69	17,812
256KB	109	100% Seq 0% Read	480	300	-	-	-	26,020	6,661,120.0	11.5	26,020	6,661,120.0	11.5	86	22,203
256KB	110	60% Seq 0% Read	480	300	-	-	-	21,891	5,604,096.0	13.7	21,891	5,604,096.0	13.7	72	18,680
256KB	111	30% Seq 0% Read	480	300	-	-	-	20,484	5,243,904.0	14.6	20,484	5,243,904.0	14.6	68	17,479
256KB	112	0% Seq 0% Read	480	300	-	-	-	20,135	5,154,560.0	14.9	20,135	5,154,560.0	14.9	67	17,181

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Worker count = 1

1/11/2015

Note: High IO rates/transfers at 100% seq, 100% read may be locality of reference of drive level cache

STX ST4000DM000 3.5" 7.2K 4TB (External Raw LSI SAS HBA)

Test / Step information section					Reads			Writes			Totals (R+W)		Overall Averages (R+W)		
IO Size	Test Step	Pattern	Total Run Time Sec (with pauses)	Test Time Sec	Total Reads	Total Read KB	Avg Read Resp	Total Writes	Total Write KB	Avg Write Resp	Total IO (R+W)	Total KB (R+W)	STX ST4000DM0 7.2K 4TB Avg Resp (R+W)	STX ST4000DM0 7.2K 4TB IOP Sec (R+W)	STX ST4000DM000 3.5" SATA 7.2K 4TB KB Sec (R+W)
512KB	113	100% Seq 100% Read	480	300	101,602	52,020,224	2.95	-	-	-	101,602	52,020,224	2.95	338	173,400
512KB	114	60% Seq 100% Read	480	300	27,954	14,312,448.0	10.7	-	-	-	27,954	14,312,448.0	10.7	93	47,708
512KB	115	30% Seq 100% Read	480	300	22,033	11,280,896.0	13.6	-	-	-	22,033	11,280,896.0	13.6	73	37,602
512KB	116	0% Seq 100% Read	480	300	19,998	10,238,976.0	15.0	-	-	-	19,998	10,238,976.0	15.0	66	34,129
512KB	117	100% Seq 60% Read	480	300	20,525	10,508,800.0	4.0	13,494	6,908,928.0	16.2	34,019	17,417,728.0	8.8	113	58,059
512KB	118	60% Seq 60% Read	480	300	14,107	7,222,784.0	9.7	9,177	4,698,624.0	17.8	23,284	11,921,408.0	12.9	77	39,738
512KB	119	30% Seq 60% Read	480	300	11,972	6,129,664.0	12.8	8,170	4,183,040.0	17.9	20,142	10,312,704.0	14.9	67	34,375
512KB	120	0% Seq 60% Read	480	300	11,464	5,869,568.0	14.7	7,521	3,850,752.0	17.5	18,985	9,720,320.0	15.8	63	32,401
512KB	121	100% Seq 30% Read	480	300	7,802	3,994,624.0	4.5	18,245	9,341,440.0	14.5	26,047	13,336,064.0	11.5	86	44,453
512KB	122	60% Seq 30% Read	480	300	6,493	3,324,416.0	8.6	15,172	7,768,064.0	16.1	21,665	11,092,480.0	13.8	72	36,974
512KB	123	30% Seq 30% Read	480	300	5,794	2,966,528.0	12.1	13,458	6,890,496.0	17.1	19,252	9,857,024.0	15.6	64	32,856
512KB	124	0% Seq 30% Read	480	300	5,482	2,806,784.0	14.5	12,842	6,575,104.0	17.2	18,324	9,381,888.0	16.4	61	31,272
512KB	125	100% Seq 0% Read	480	300	-	-	-	23,009	11,780,608.0	13.0	23,009	11,780,608.0	13.0	76	39,268
512KB	126	60% Seq 0% Read	480	300	-	-	-	19,142	9,800,704.0	15.7	19,142	9,800,704.0	15.7	63	32,669
512KB	127	30% Seq 0% Read	480	300	-	-	-	17,494	8,956,928.0	17.1	17,494	8,956,928.0	17.1	58	29,856
512KB	128	0% Seq 0% Read	480	300	-	-	-	17,608	9,015,296.0	17.0	17,608	9,015,296.0	17.0	58	30,050

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Worker count = 1

1/11/2015

Note: High IO rates/transfers at 100% seq, 100% read may be locality of reference of drive level cache

STX ST4000DM000 3.5" 7.2K 4TB (External Raw LSI SAS HBA)

Test / Step information section					Reads			Writes			Totals (R+W)		Overall Averages (R+W)		
IO Size	Test Step	Pattern	Total Run Time Sec (with pauses)	Test Time Sec	Total Reads	Total Read KB	Avg Read Resp	Total Writes	Total Write KB	Avg Write Resp	Total IO (R+W)	Total KB (R+W)	STX ST4000DM0 7.2K 4TB Avg Resp (R+W)	STX ST4000DM0 7.2K 4TB IOP Sec (R+W)	STX ST4000DM000 3.5" SATA 7.2K 4TB KB Sec (R+W)
1024KB	129	100% Seq 100% Read	480	300	50,422	51,632,128	5.95	-	-	-	50,422	51,632,128	5.95	168	172,107
1024KB	130	60% Seq 100% Read	480	300	21,601	22,119,424.0	13.9	-	-	-	21,601	22,119,424.0	13.9	72	73,731
1024KB	131	30% Seq 100% Read	480	300	18,188	18,624,512.0	16.5	-	-	-	18,188	18,624,512.0	16.5	60	62,081
1024KB	132	0% Seq 100% Read	480	300	16,705	17,105,920.0	18.0	-	-	-	16,705	17,105,920.0	18.0	55	57,019
1024KB	133	100% Seq 60% Read	480	300	13,826	14,157,824.0	7.6	9,339	9,563,136.0	20.9	23,165	23,720,960.0	13.0	77	79,069
1024KB	134	60% Seq 60% Read	480	300	11,192	11,460,608.0	12.7	7,401	7,578,624.0	21.4	18,593	19,039,232.0	16.1	61	63,464
1024KB	135	30% Seq 60% Read	480	300	9,838	10,074,112.0	16.0	6,589	6,747,136.0	21.6	16,427	16,821,248.0	18.3	54	56,070
1024KB	136	0% Seq 60% Read	480	300	9,254	9,476,096.0	17.7	6,217	6,366,208.0	21.9	15,471	15,842,304.0	19.4	51	52,807
1024KB	137	100% Seq 30% Read	480	300	6,373	6,525,952.0	7.0	14,701	15,053,824.0	17.3	21,074	21,579,776.0	14.2	70	71,932
1024KB	138	60% Seq 30% Read	480	300	5,000	5,120,000.0	12.6	11,423	11,697,152.0	20.8	16,423	16,817,152.0	18.3	54	56,057
1024KB	139	30% Seq 30% Read	480	300	4,578	4,687,872.0	16.0	10,740	10,997,760.0	21.1	15,318	15,685,632.0	19.6	51	52,285
1024KB	140	0% Seq 30% Read	480	300	4,498	4,605,952.0	17.5	10,219	10,464,256.0	21.7	14,717	15,070,208.0	20.4	49	50,234
1024KB	141	100% Seq 0% Read	480	300	-	-	-	18,696	19,144,704.0	16.0	18,696	19,144,704.0	16.0	62	63,815
1024KB	142	60% Seq 0% Read	480	300	-	-	-	15,587	15,961,088.0	19.2	15,587	15,961,088.0	19.2	51	53,203
1024KB	143	30% Seq 0% Read	480	300	-	-	-	14,416	14,761,984.0	20.8	14,416	14,761,984.0	20.8	48	49,206
1024KB	144	0% Seq 0% Read	480	300	-	-	-	14,002	14,338,048.0	21.4	14,002	14,338,048.0	21.4	46	47,793

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Worker count = 1

1/11/2015

Note: High IO rates/transfers at 100% seq, 100% read may be locality of reference of drive level cache

STX ST4000DM000 3.5" 7.2K 4TB (External Raw LSI SAS HBA)

Test / Step information section					Reads			Writes			Totals (R+W)		Overall Averages (R+W)		
IO Size	Test Step	Pattern	Total Run Time Sec (with pauses)	Test Time Sec	Total Reads	Total Read KB	Avg Read Resp	Total Writes	Total Write KB	Avg Write Resp	Total IO (R+W)	Total KB (R+W)	STX ST4000DM0 7.2K 4TB Avg Resp (R+W)	STX ST4000DM0 7.2K 4TB IOP Sec (R+W)	STX ST4000DM000 3.5" SATA 7.2K 4TB KB Sec (R+W)
2048KB	145	100% Seq 100% Read	480	300	24,909	51,013,632	12.04	-	-	-	24,909	51,013,632	12.04	83	170,045
2048KB	146	60% Seq 100% Read	480	300	15,601	31,950,848.0	19.2	-	-	-	15,601	31,950,848.0	19.2	52	106,502
2048KB	147	30% Seq 100% Read	480	300	12,943	26,507,264.0	23.2	-	-	-	12,943	26,507,264.0	23.2	43	88,357
2048KB	148	0% Seq 100% Read	480	300	12,500	25,600,000.0	24.0	-	-	-	12,500	25,600,000.0	24.0	41	85,333
2048KB	149	100% Seq 60% Read	480	300	8,866	18,157,568.0	13.4	5,984	12,255,232.0	30.3	14,850	30,412,800.0	20.2	49	101,376
2048KB	150	60% Seq 60% Read	480	300	7,583	15,529,984.0	19.1	5,093	10,430,464.0	30.5	12,676	25,960,448.0	23.7	42	86,534
2048KB	151	30% Seq 60% Read	480	300	7,068	14,475,264.0	22.3	4,671	9,566,208.0	30.4	11,739	24,041,472.0	25.6	39	80,138
2048KB	152	0% Seq 60% Read	480	300	6,773	13,871,104.0	23.7	4,548	9,314,304.0	30.7	11,321	23,185,408.0	26.5	37	77,284
2048KB	153	100% Seq 30% Read	480	300	4,086	8,368,128.0	13.9	9,442	19,337,216.0	25.7	13,528	27,705,344.0	22.2	45	92,351
2048KB	154	60% Seq 30% Read	480	300	3,404	6,971,392.0	19.1	8,166	16,723,968.0	28.8	11,570	23,695,360.0	25.9	38	78,984
2048KB	155	30% Seq 30% Read	480	300	3,214	6,582,272.0	22.2	7,621	15,607,808.0	30.0	10,835	22,190,080.0	27.7	36	73,966
2048KB	156	0% Seq 30% Read	480	300	3,284	6,725,632.0	23.4	7,293	14,936,064.0	30.6	10,577	21,661,696.0	28.4	35	72,205
2048KB	157	100% Seq 0% Read	480	300	-	-	-	13,676	28,008,448.0	21.9	13,676	28,008,448.0	21.9	45	93,361
2048KB	158	60% Seq 0% Read	480	300	-	-	-	11,035	22,599,680.0	27.2	11,035	22,599,680.0	27.2	36	75,332
2048KB	159	30% Seq 0% Read	480	300	-	-	-	10,106	20,697,088.0	29.7	10,106	20,697,088.0	29.7	33	68,990
2048KB	160	0% Seq 0% Read	480	300	-	-	-	9,877	20,228,096.0	30.4	9,877	20,228,096.0	30.4	32	67,426