

Range-BW – Basic Evaluation

- **Testing tool and its command :**

xdd.linux *-op write* -targets 1 /dev/mapper/ioband1 -reqsize 8 -numreqs 128000 -verbose *-timelimit 10*
-dio

- **Evaluation 1**

- configuration
 - Group1 : 2M / 5M
 - Group2 : 6M / 10M
 - Group3 : 10M / 15M

- **Result**

- Group1

	T	Q	Bytes	Ops	Time	Rate	IOPS	Latency	%CPU	OP_Type	ReqSize	
TARGET	PASS0001	0	1	49143808	5999	10,026	4,902	598,34	0,0017	0,00	write	8192
TARGET	Average	0	1	49143808	5999	10,026	4,902	598,34	0,0017	0,00	write	8192
	Combined	1	1	49143808	5999	10,026	4,902	598,34	0,0017	0,00	write	8192

- Ending time for this run, Wed Dec 17 16:33:17 2008

- Group2

	T	Q	Bytes	Ops	Time	Rate	IOPS	Latency	%CPU	OP_Type	ReqSize	
TARGET	PASS0001	0	1	101588992	12401	10,037	10,121	1235,48	0,0008	0,00	write	8192
TARGET	Average	0	1	101588992	12401	10,037	10,121	1235,48	0,0008	0,00	write	8192
	Combined	1	1	101588992	12401	10,037	10,121	1235,48	0,0008	0,00	write	8192

- Ending time for this run, Wed Dec 17 16:33:17 2008

- Group3

	T	Q	Bytes	Ops	Time	Rate	IOPS	Latency	%CPU	OP_Type	ReqSize	
TARGET	PASS0001	0	1	153690112	18761	10,054	15,286	1866,00	0,0005	0,00	write	8192
TARGET	Average	0	1	153690112	18761	10,054	15,286	1866,00	0,0005	0,00	write	8192
	Combined	1	1	153690112	18761	10,054	15,286	1866,00	0,0005	0,00	write	8192

- Ending time for this run, Wed Dec 17 16:33:17 2008

- **Evaluation 2**

- configuration
 - Group1 : 1M / 2M
 - Group2 : 5M / 10M
 - Group3 : 25M / 30M

- **Result**

- Group1

	T	Q	Bytes	Ops	Time	Rate	IOPS	Latency	%CPU	OP_Type	ReqSize	
TARGET	PASS0001	0	1	20570112	2511	10,092	2,038	248,81	0,0040	0,00	write	8192
TARGET	Average	0	1	20570112	2511	10,092	2,038	248,81	0,0040	0,00	write	8192
	Combined	1	1	20570112	2511	10,092	2,038	248,81	0,0040	0,00	write	8192

- Ending time for this run, Wed Dec 17 16:38:06 2008

- Group2

	T	Q	Bytes	Ops	Time	Rate	IOPS	Latency	%CPU	OP_Type	ReqSize	
TARGET	PASS0001	0	1	78495744	9582	10,034	7,823	954,91	0,0010	0,00	write	8192
TARGET	Average	0	1	78495744	9582	10,034	7,823	954,91	0,0010	0,00	write	8192
	Combined	1	1	78495744	9582	10,034	7,823	954,91	0,0010	0,00	write	8192

- Ending time for this run, Wed Dec 17 16:38:06 2008

- Group3

	T	Q	Bytes	Ops	Time	Rate	IOPS	Latency	%CPU	OP_Type	ReqSize	
TARGET	PASS0001	0	1	273399808	33374	10,000	27,340	3337,40	0,0003	0,00	write	8192
TARGET	Average	0	1	273399808	33374	10,000	27,340	3337,40	0,0003	0,00	write	8192
	Combined	1	1	273399808	33374	10,000	27,340	3337,40	0,0003	0,00	write	8192

- Ending time for this run, Wed Dec 17 16:38:06 2008

● Evaluation 3

- Configuration

- Group1 : 10M / 15M
- Group2 : 20M / 25M
- Group3 : 40M / 45M

● Result

- Group1

	T	Q	Bytes	Ops	Time	Rate	IOPS	Latency	%CPU	OP_Type	ReqSize	
TARGET	PASS0001	0	1	100794368	12304	10,028	10,051	1226,92	0,0008	0,00	write	8192
TARGET	Average	0	1	100794368	12304	10,028	10,051	1226,92	0,0008	0,00	write	8192
	Combined	1	1	100794368	12304	10,028	10,051	1226,92	0,0008	0,00	write	8192

- Ending time for this run, Wed Dec 17 16:42:59 2008

- Group2

	T	Q	Bytes	Ops	Time	Rate	IOPS	Latency	%CPU	OP_Type	ReqSize	
TARGET	PASS0001	0	1	143040512	17461	10,000	14,304	1746,07	0,0006	0,00	write	8192
TARGET	Average	0	1	143040512	17461	10,000	14,304	1746,07	0,0006	0,00	write	8192
	Combined	1	1	143040512	17461	10,000	14,304	1746,07	0,0006	0,00	write	8192

- Ending time for this run, Wed Dec 17 16:42:59 2008

- Group3

	T	Q	Bytes	Ops	Time	Rate	IOPS	Latency	%CPU	OP_Type	ReqSize	
TARGET	PASS0001	0	1	150192128	18334	10,000	15,019	1833,38	0,0005	0,00	write	8192
TARGET	Average	0	1	150192128	18334	10,000	15,019	1833,38	0,0005	0,00	write	8192
	Combined	1	1	150192128	18334	10,000	15,019	1833,38	0,0005	0,00	write	8192

- Ending time for this run, Wed Dec 17 16:42:59 2008

● Evaluation 4

- Configuration

- Group1 : 0.5M / 1M
- Group2 : 1M / 2M
- Group3 : 2M / 3M

● Result

- Group1

	T	Q	Bytes	Ops	Time	Rate	IOPS	Latency	%CPU	OP_Type	ReqSize	
TARGET	PASS0001	0	1	10330112	1261	10,397	0,994	121,28	0,0082	0,00	write	8192
TARGET	Average	0	1	10330112	1261	10,397	0,994	121,28	0,0082	0,00	write	8192
	Combined	1	1	10330112	1261	10,397	0,994	121,28	0,0082	0,00	write	8192

- Ending time for this run, Wed Dec 17 16:47:52 2008

- Group2

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- TARGET PASS0001 0 1 20570112 2511 10,245 2,008 245,09 0,0041 0,00 write 8192
- TARGET Average 0 1 20570112 2511 10,245 2,008 245,09 0,0041 0,00 write 8192
- Combined 1 1 20570112 2511 10,245 2,008 245,09 0,0041 0,00 write 8192
- Ending time for this run, Wed Dec 17 16:47:52 2008

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- Group3

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- TARGET PASS0001 0 1 30810112 3761 10,027 3,073 375,07 0,0027 0,00 write 8192
- TARGET Average 0 1 30810112 3761 10,027 3,073 375,07 0,0027 0,00 write 8192
- Combined 1 1 30810112 3761 10,027 3,073 375,07 0,0027 0,00 write 8192
- Ending time for this run, Wed Dec 17 16:47:52 2008

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● Evaluation 5

- Configuration

- Group0 : Not Set / Not Set
- Group1 : 0.5M / 1M
- Group2 : 1M / 2M
- Group3 : 2M / 3M

● Result

- Group0

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- TARGET PASS0001 0 1 293281792 35801 10,000 29,328 3580,05 0,0003 0,00 write 8192
- TARGET Average 0 1 293281792 35801 10,000 29,328 3580,05 0,0003 0,00 write 8192
- Combined 1 1 293281792 35801 10,000 29,328 3580,05 0,0003 0,00 write 8192
- Ending time for this run, Wed Dec 17 16:52:32 2008

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- Group1

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- TARGET PASS0001 0 1 10330112 1261 10,202 1,013 123,60 0,0081 0,00 write 8192
- TARGET Average 0 1 10330112 1261 10,202 1,013 123,60 0,0081 0,00 write 8192
- Combined 1 1 10330112 1261 10,202 1,013 123,60 0,0081 0,00 write 8192
- Ending time for this run, Wed Dec 17 16:52:31 2008

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- Group2

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- TARGET PASS0001 0 1 22626304 2762 10,895 2,077 253,52 0,0039 0,00 write 8192
- TARGET Average 0 1 22626304 2762 10,895 2,077 253,52 0,0039 0,00 write 8192
- Combined 1 1 22626304 2762 10,895 2,077 253,52 0,0039 0,00 write 8192
- Ending time for this run, Wed Dec 17 16:52:32 2008

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- Group3

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- TARGET PASS0001 0 1 33890304 4137 10,737 3,156 385,30 0,0026 0,00 write 8192
- TARGET Average 0 1 33890304 4137 10,737 3,156 385,30 0,0026 0,00 write 8192
- Combined 1 1 33890304 4137 10,737 3,156 385,30 0,0026 0,00 write 8192
- Ending time for this run, Wed Dec 17 16:52:32 2008

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● Evaluation 6

- Configuration

- Group1 : Not Set / Not Set
- Group2 : Not Set / Not Set
- Group3 : Not Set / Not Set

● Result

- Group1

	T	Q	Bytes	Ops	Time	Rate	IOPS	Latency	%CPU	OP_Type	ReqSize	
TARGET	PASS0001	0	1	116555776	14228	10,036	11,614	1417,70	0,0007	0,00	write	8192
TARGET	Average	0	1	116555776	14228	10,036	11,614	1417,70	0,0007	0,00	write	8192
TARGET	Combined	1	1	116555776	14228	10,036	11,614	1417,70	0,0007	0,00	write	8192

- Ending time for this run, Wed Dec 17 16:58:27 2008

- Group2

	T	Q	Bytes	Ops	Time	Rate	IOPS	Latency	%CPU	OP_Type	ReqSize	
TARGET	PASS0001	0	1	120610816	14723	10,000	12,061	1472,28	0,0007	0,00	write	8192
TARGET	Average	0	1	120610816	14723	10,000	12,061	1472,28	0,0007	0,00	write	8192
TARGET	Combined	1	1	120610816	14723	10,000	12,061	1472,28	0,0007	0,00	write	8192

- Ending time for this run, Wed Dec 17 16:58:28 2008

- Group3

	T	Q	Bytes	Ops	Time	Rate	IOPS	Latency	%CPU	OP_Type	ReqSize	
TARGET	PASS0001	0	1	125870080	15365	10,000	12,587	1536,48	0,0007	0,00	write	8192
TARGET	Average	0	1	125870080	15365	10,000	12,587	1536,48	0,0007	0,00	write	8192
TARGET	Combined	1	1	125870080	15365	10,000	12,587	1536,48	0,0007	0,00	write	8192

- Ending time for this run, Wed Dec 17 16:58:28 2008

● Evaluation 7 (Additional Test)

- Configuration

- Group1 : 200K / 400K
- Group2 : 500K / 700K
- Group3 : 300K / 500K

● Result

- Group1

	T	Q	Bytes	Ops	Time	Rate	IOPS	Latency	%CPU	OP_Type	ReqSize	
TARGET	PASS0001	0	1	4186112	511	10,397	0,403	49,15	0,0203	0,00	write	8192
TARGET	Average	0	1	4186112	511	10,397	0,403	49,15	0,0203	0,00	write	8192
TARGET	Combined	1	1	4186112	511	10,397	0,403	49,15	0,0203	0,00	write	8192

- Ending time for this run, Wed Dec 17 17:03:53 2008

- Group2

	T	Q	Bytes	Ops	Time	Rate	IOPS	Latency	%CPU	OP_Type	ReqSize	
TARGET	PASS0001	0	1	7299072	891	10,219	0,714	87,19	0,0115	0,00	write	8192
TARGET	Average	0	1	7299072	891	10,219	0,714	87,19	0,0115	0,00	write	8192
TARGET	Combined	1	1	7299072	891	10,219	0,714	87,19	0,0115	0,00	write	8192

- Ending time for this run, Wed Dec 17 17:03:53 2008

- Group3

	T	Q	Bytes	Ops	Time	Rate	IOPS	Latency	%CPU	OP_Type	ReqSize	
TARGET	PASS0001	0	1	5251072	641	10,029	0,524	63,91	0,0156	0,00	write	8192
TARGET	Average	0	1	5251072	641	10,029	0,524	63,91	0,0156	0,00	write	8192
TARGET	Combined	1	1	5251072	641	10,029	0,524	63,91	0,0156	0,00	write	8192

- Ending time for this run, Wed Dec 17 17:03:53 2008