Data Doc for fio testing

Read-only
sudo fio --filename=/dev/sdb --rw=read --direct=1 --runtime=20 --numjobs=1 --time_based --group_reporting --name=seq_read --ioengine=sync --iodepth_batch=1 --bs=4k

I/O depth vs data access size	4k	16k	32k	128k
1	987 [4]	2707 [6]	3804 [8]	5256 [22]
16	1005 [3.6]	2643 [6]	3651 [8]	5017 [22]
128	989 [4]	2621 [6]	3689 [8]	4907 [22]
1024	947 [3.5]	2207 [6]	3655 [8]	5008 [22]

throughput in MB/s [latency time in usec (50th percentile)]

write-only
sudo fio --filename=/dev/sdb --rw=write --direct=1 --runtime=20 --numjobs=1 --time_based --group_reporting --name=seq_write --ioengine=sync --bs=32k --iodepth_batch=1 --bs=4k

I/O depth vs data access size	4k	16k	32k	128k
1	517 [5]	724[9]	778 [15]	871 [50]
16	506 [5]	706 [9]	791 [15]	843 [49]
128	495 [5]	707 [9]	791 [15]	802 [50]
1024	504 [5]	686 [10]	777 [15]	860 [49]

throughput in MB/s [latency time in usec (50th percentile)]

50:50 read-write
(default for --rw=randrw is 50% read and 50% write)
sudo fio --filename=/dev/sdb --rw=randrw --direct=1 --runtime=20 --numjobs=1 --time_based --group_reporting --name=50_50_random_read_and_write --ioengine=sync --iodepth_batch=1 --bs=4k

I/O depth vs data access size	4k	16k	32k	128
1	82 [6] 82 [7]	256 [8] 256 [12]	363 [10] 364 [17]	496 [28] 493 [50]
16	85 [6] 85 [7]	252 [8] 252 [12]	342 [11] 342 [17]	468 [28] 464 [50]
128	82.7 [6] 82.6 [7]	237 [8] 237 [12]	352 [10] 352 [17]	491 [28] 487 [50]
1024	75.6 [6] 75.5 [7]	238 [8] 238 [12]	260 [11] 260 [18]	396 [30] 395 [52]

Read throughput in MB/s [latency time in usec (50th percentile)]
Write throughput in MB/s [latency time in usec (50th percentile)]

Data Doc for fio testing

70:30 read-write
(--rwmixread=30 would mean that 30% of the I/O will be reads and 70% will be writes)
sudo fio --filename=/dev/sdb --rw=randrw --direct=1 --runtime=20 --numjobs=1 --time_based --group_reporting --name=70_30_random_read_and_write --rwmixread=70 --ioengine=sync --iodepth_batch=1 --bs=4k

I/O depth vs data access size	4k	16k	32k	128
1	160 [5] 69 [7]	449 [8] 193 [12]	688 [10] 295 [17]	956 [27] 409 [50]
16	162 [5] 69 [7]	448 [8] 192 [12]	702 [10] 301 [17]	959 [26] 410 [50]
128	139 [6] 60 [8]	371 [8] 159 [12]	628 [10] 270 [17]	837 [26] 358 [50]
1024	143 [6] 62 [7]	285 [8] 122 [13]	370 [12] 159 [19]	923 [27] 395 [50]

Read throughput in MB/s [latency time in usec (50th percentile)]
Write throughput in MB/s [latency time in usec (50th percentile)]

Note: in the 99.5th and higher percentile, we see latency for read operation increase to 1,000 usec at max, but for write latency, latency increases up to 140,000 usec at max