

Comparitive Performance Report for squid-ec-2+2-4k vs squid-ec-4+2-4k vs squid-ec-6+2-4k vs tentacle-fast-ec-2+2-16k vs tentacle-fast-ec-4+2-16k vs tentacle-fast-ec-6+2-16k

Comparitive Performance Report for squid-ec-2+2-4k vs squid-ec-4+2-4k vs squid-ec-6+2-4k vs tentacle-fast-ec-2+2-16k vs tentacle-fast-ec-4+2-16k vs tentacle-fast-ec-6+2-16k

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Comparison summary for squid-ec-2+2-4k vs squid-ec-4+2-4k vs squid-ec-6+2-4k vs tentacle-fast-ec-2+2-16k vs tentacle-fast-ec-4+2-16k vs tentacle-fast-ec-6+2-16k

	squid- ec- Sequential Read	squid- ec- 2+2- 4k	squid- ec- 4+2- 4k	squid- ec- 6+2- %change	tentacle- fast-ec- 2+2- 16k	tentacle- fast-ec- 4+2- 16k	tentacle- fast-ec- 6+2- 16k	tentacle- fast-ec- 6+2- %change
4K	94850@1.081908@4.7	-14%	58638@6.5	-38%	116011@1.7	22%	143642@2.7	51%
8K	69102@5.667577@5.7	-2%	53638@5.4	-22%	112092@3.4	62%	140289@2.7103%	155175@2.5125%
16K	65610@4.451453@5.6	-22%	46954@6.1	-28%	105755@2.7	61%	126594@2.3	93%
32K	60081@3.248711@3.9	-19%	38463@5.0	-36%	60913@3.1	1%	76709@2.5	28%
64K	3326@5.012675@6.3	-20%	2255@7.4	-32%	3375@5.0	1%	2998@5.6	-10%
128K	6442@2.6m814@2.9	-10%	4536@3.7	-30%	6513@2.6	1%	5947@2.8	-8%
256K	6621@2.516157@2.7	-7%	5135@3.3	-22%	6826@2.5	3%	6420@2.6	-3%
512K	5820@3.6m832@3.6	0%	5217@4.0	-10%	6171@3.4	6%	6346@3.3	9%
1024K	5820@3.6m832@3.6	0%	5217@4.0	-10%	6171@3.4	6%	6186@3.4	6%

	squid- ec- Sequential Write	squid- ec- 2+2- 4k	squid- ec- 4+2- 4k	squid- ec- 6+2- %change	tentacle- fast-ec- 2+2- 16k	tentacle- fast-ec- 4+2- 16k	tentacle- fast-ec- 6+2- 16k	tentacle- fast-ec- 6+2- %change	
4K	199873@7.15m1417@10.124%	136232@11.332%	308708@5.0	54%	280184@5.5	40%	252680@6.1	26%	
8K	232463@6.15m4665@9.9	-33%	130892@11.744%	228367@6.7	-2%	217309@7.1	-7%	198909@7.7	-14%
16K	132920@7.13m1050@7.8	-1%	86109@11.9	-35%	135932@7.5	2%	131110@7.8	-1%	
32K	74942@10.78284@9.8	4%	50412@15.2	-33%	80391@9.5	7%	79346@9.7	6%	
64K	2565@13.12m83@12.0	8%	2095@16.0	-18%	2870@11.7	12%	2908@11.5	13%	
128K	3179@21.03m06@19.0	10%	2797@23.9	-12%	3386@19.7	7%	3621@18.4	14%	
256K	3420@19.4m62@18.6	4%	2870@23.2	-16%	3832@8.5	12%	3809@17.4	11%	
512K	3793@34.9m198@30.7	14%	3689@45.0	-3%	4199@31.4	11%	4645@35.6	22%	
1024K	3793@34.9m198@30.7	14%	3689@45.0	-3%	4199@31.4	11%	4218@39.2	11%	

	squid- ec- Random Read	squid- ec- 2+2- 4k	squid- ec- 4+2- 4k	squid- ec- 6+2- %change	tentacle- fast-ec- 2+2- 16k	tentacle- fast-ec- 4+2- 16k	tentacle- fast-ec- 6+2- 16k	tentacle- fast-ec- 6+2- %change
4K	82748@7.15m372@14.4	-36%	36952@10.4	-55%	128583@3.0	55%	125142@6.1	51%
8K	81281@9.4m802@14.3	-34%	36424@21.1	-55%	117727@5.0	45%	118048@6.5	45%
16K	77611@7.6m374@11.0	-31%	35473@16.6	-54%	112346@5.2	45%	110136@5.3	42%
32K	70360@5.4m853@2.6	-31%	32165@7.9	-54%	68917@5.6	-2%	70582@3.6	0%
64K	3807@4.4m2926@5.7	-23%	1897@8.8	-50%	3627@6.9	-5%	2749@6.1	-28%
128K	8382@4.0m280@5.3	-25%	4363@3.8	-48%	7952@4.2	-5%	5778@5.8	-31%
256K	9275@3.6m318@4.6	-21%	5493@4.6	-41%	8769@3.8	-5%	7132@4.7	-23%
512K	9275@3.6m318@4.6	-21%	5493@4.6	-41%	8769@3.8	-5%	6387@5.2	-31%

Comparison summary for squid-ec-2+2-4k vs squid-ec-4+2-4k vs squid-ec-6+2-4k vs tentacle-fast-ec-2+2-16k vs tentacle-fast-ec-4+2-16k vs tentacle-fast-ec-6+2-16k

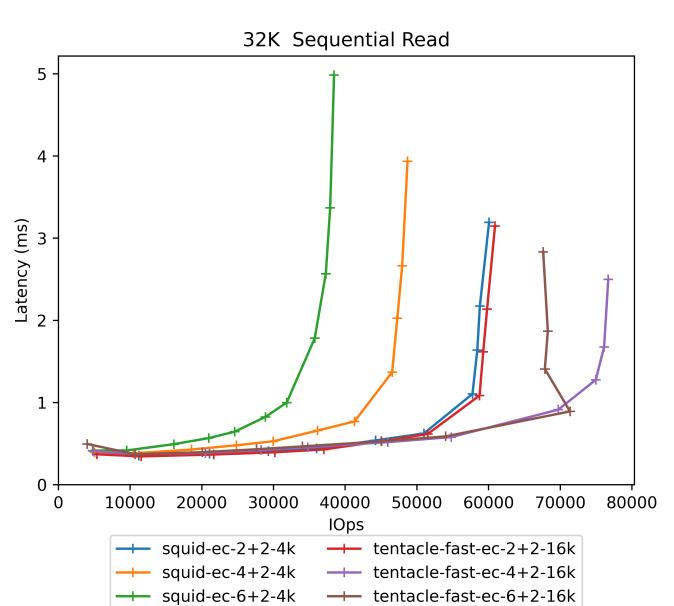
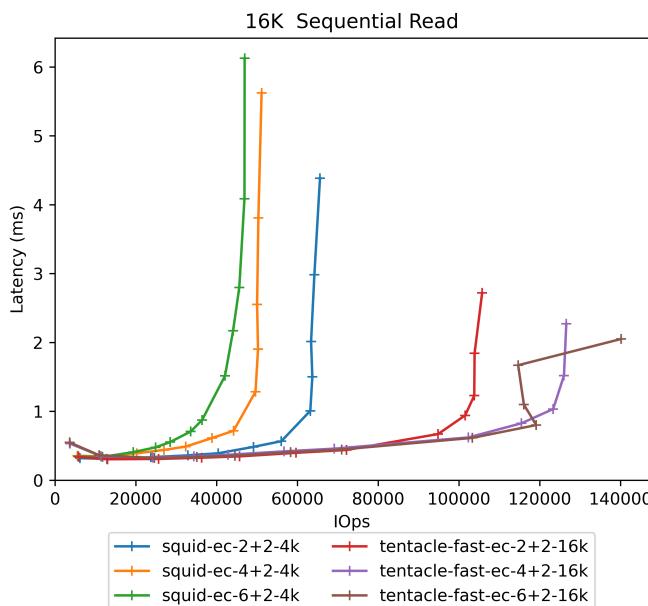
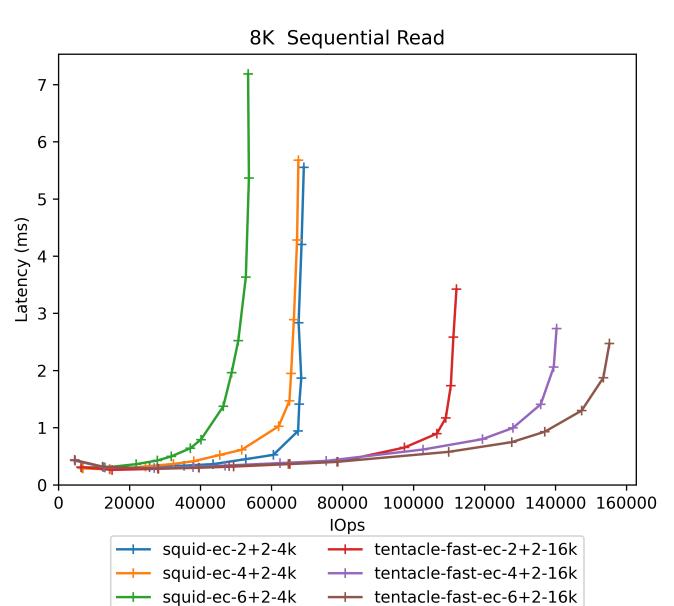
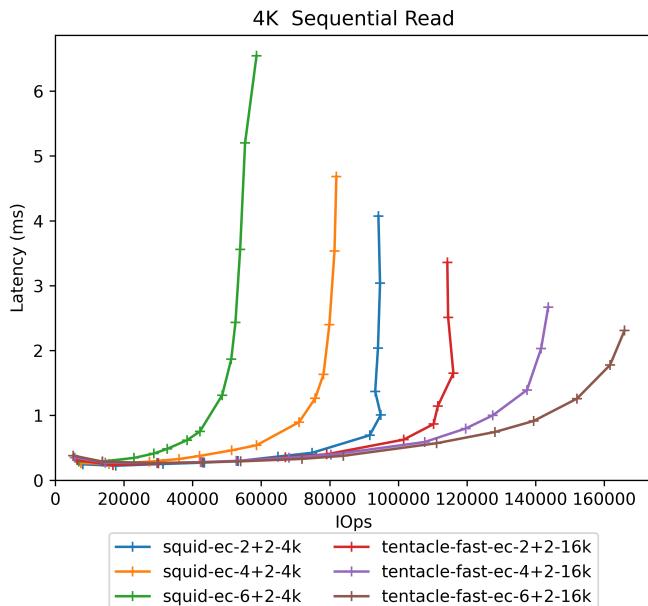
	squid- ec- 2+2- 4k	squid- ec- 4+2- 4k	squid- ec- 6+2- 4k	tentacle- fast-ec- 2+2- 16k	tentacle- fast-ec- 4+2- 16k	tentacle- fast-ec- 6+2- 16k					
Random Read											
1024K	7708@4.3m	6028@4.8	-9%	5846@5.7	-24%	7898@4.2	2%	7381@4.5	-4%	7048@4.7	-9%

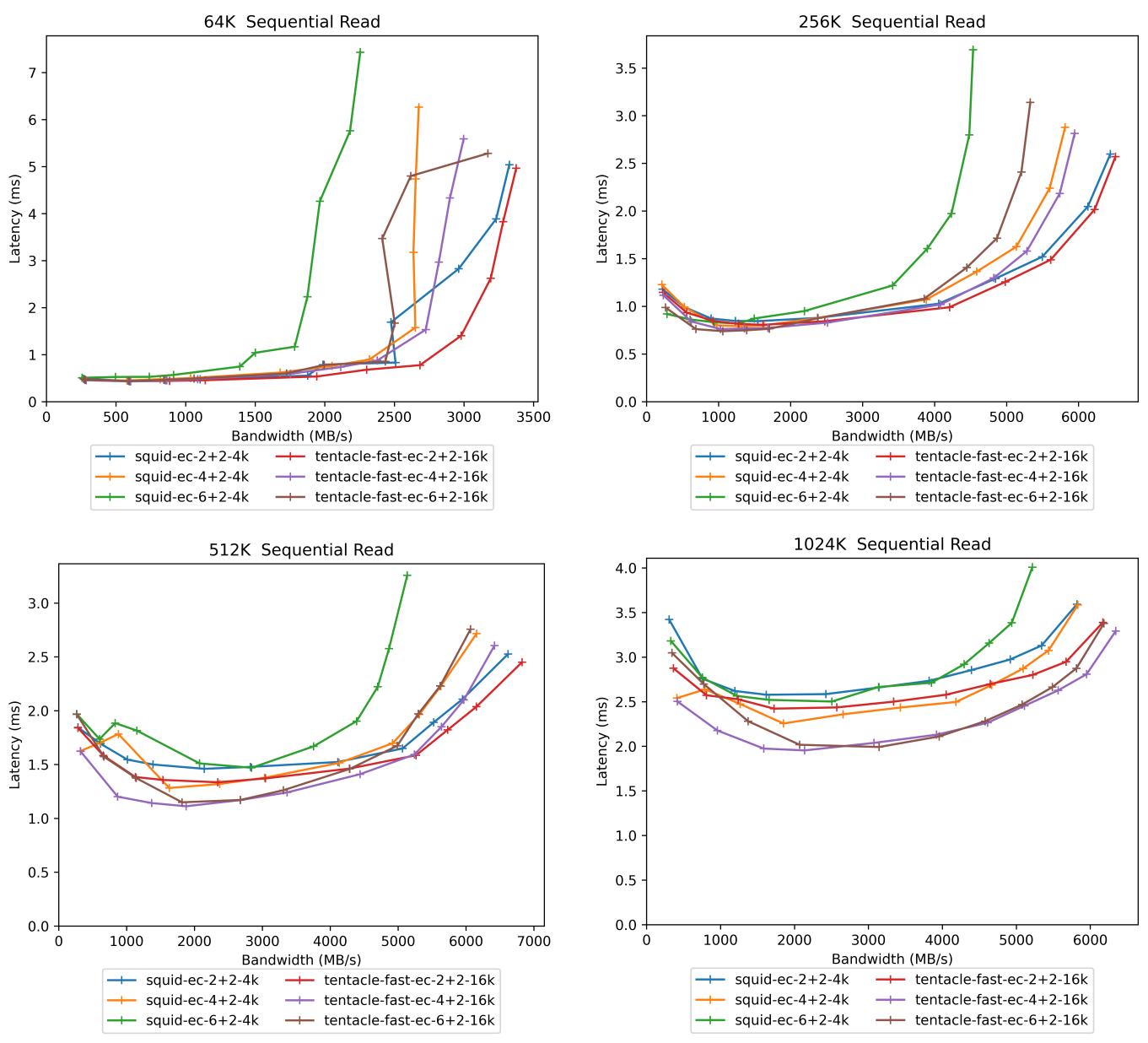
	squid- ec- 2+2- 4k	squid- ec- 4+2- 4k	squid- ec- 6+2- 4k	tentacle- fast-ec- 2+2- 16k	tentacle- fast-ec- 4+2- 16k	tentacle- fast-ec- 6+2- 16k					
Random Write											
4K	15611@8.2m	1381@8.9	-8%	10725@71.6	-31%	18757@40.9	20%	18916@40.6	21%	23646@21.6	51%
8K	18101@42.5m	13490@28.4	-25%	10706@71.7	-41%	18829@40.8	4%	17888@42.9	-1%	22343@34.4	23%
16K	17949@21.1m	16340@31.3	-9%	10123@50.5	-44%	17731@28.9	-1%	17659@14.5	-2%	20872@24.5	16%
32K	17281@22.1m	15072@32.0	-8%	10117@50.6	-41%	16465@23.3	-5%	15931@24.1	-8%	15269@16.7	-12%
64K	1116@22.5m	108@22.7	-1%	596@42.2	-47%	1020@24.6	-9%	890@9.4	-20%	827@30.4	-26%
256K	3097@21.3m	253@23.4	-8%	1785@37.5	-42%	2961@22.5	-4%	2623@25.5	-15%	2105@31.7	-32%
512K	3587@9.1m	2623@9.0	1%	2534@9.7	-29%	3687@8.8	3%	3507@9.3	-2%	2910@11.3	-19%
1024K	3858@12.6m	264@11.3	11%	3217@15.2	-17%	4124@11.7	7%	4309@11.2	12%	3905@12.4	1%

	squid- ec- 2+2- 4k	squid- ec- 4+2- 4k	squid- ec- 6+2- 4k	tentacle- fast-ec- 2+2- 16k	tentacle- fast-ec- 4+2- 16k	tentacle- fast-ec- 6+2- 16k					
Random Read/Write											
4K_70/30	33145@11.2m	698@15.5	-25%	21146@18.1	-36%	40925@6.2	23%	39936@6.4	20%	46650@8.2	41%
16K_70/30	3470@3.8m	535@2.5	-24%	19770@12.9	-41%	38687@6.6	16%	36732@7.0	10%	41239@6.2	23%
64K_30/70	308@12.8m	45@6.9	-7%	739@22.7	-44%	1252@13.4	-4%	968@6.5	-26%	982@17.0	-25%
64K_70/30	3026@4.1m	621@5.2	-20%	1147@14.6	-43%	1847@9.1	-9%	1415@11.8	-30%	1438@5.8	-29%

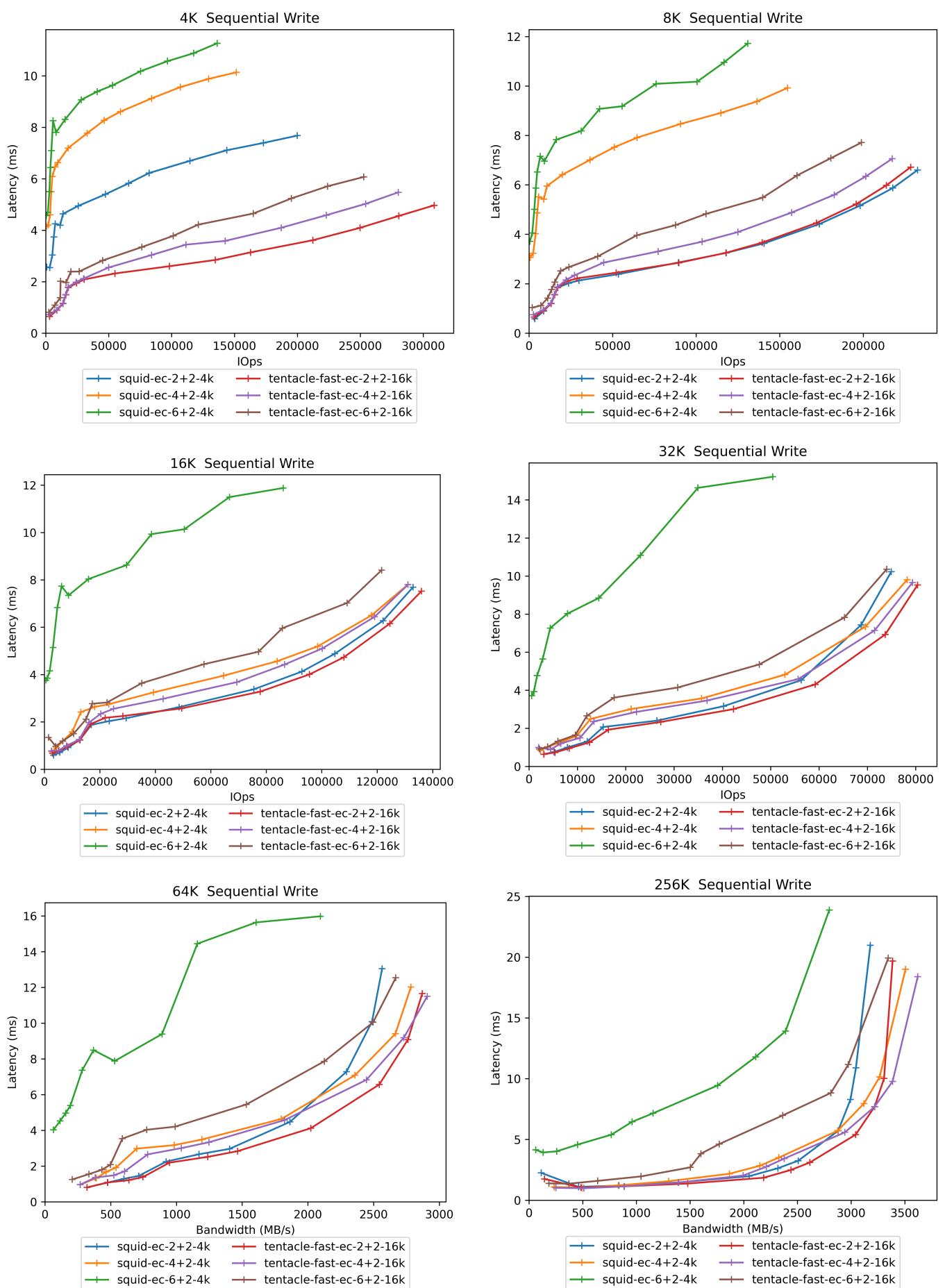
Response Curves

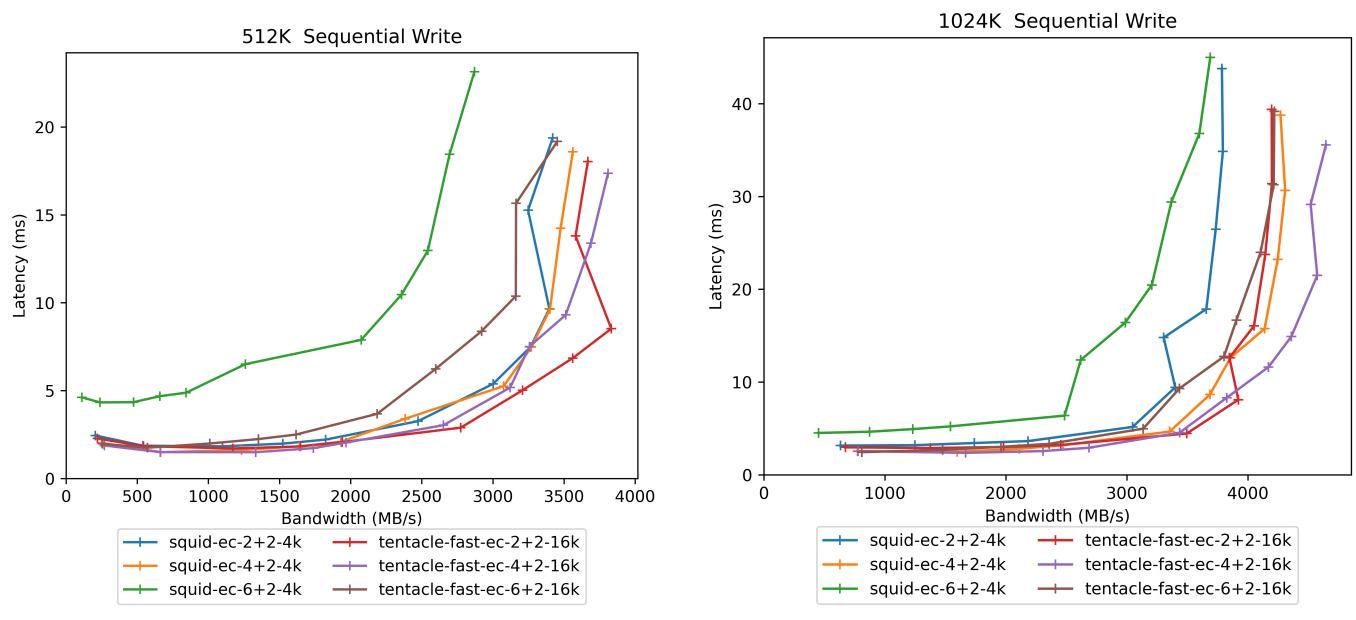
Sequential Read



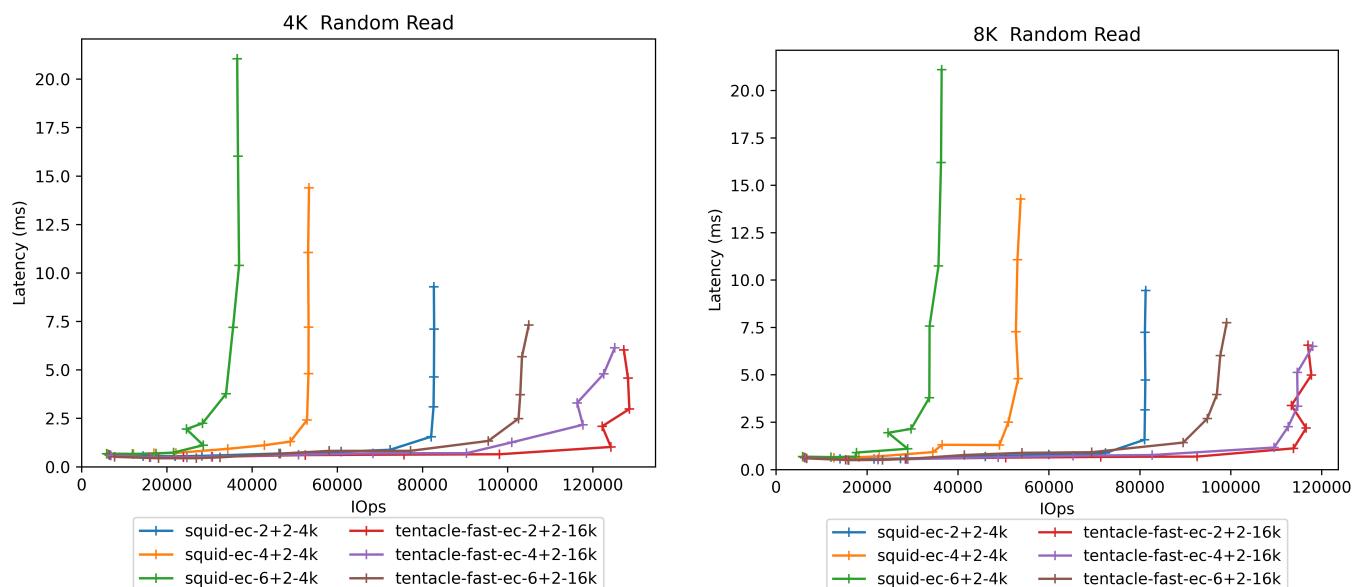


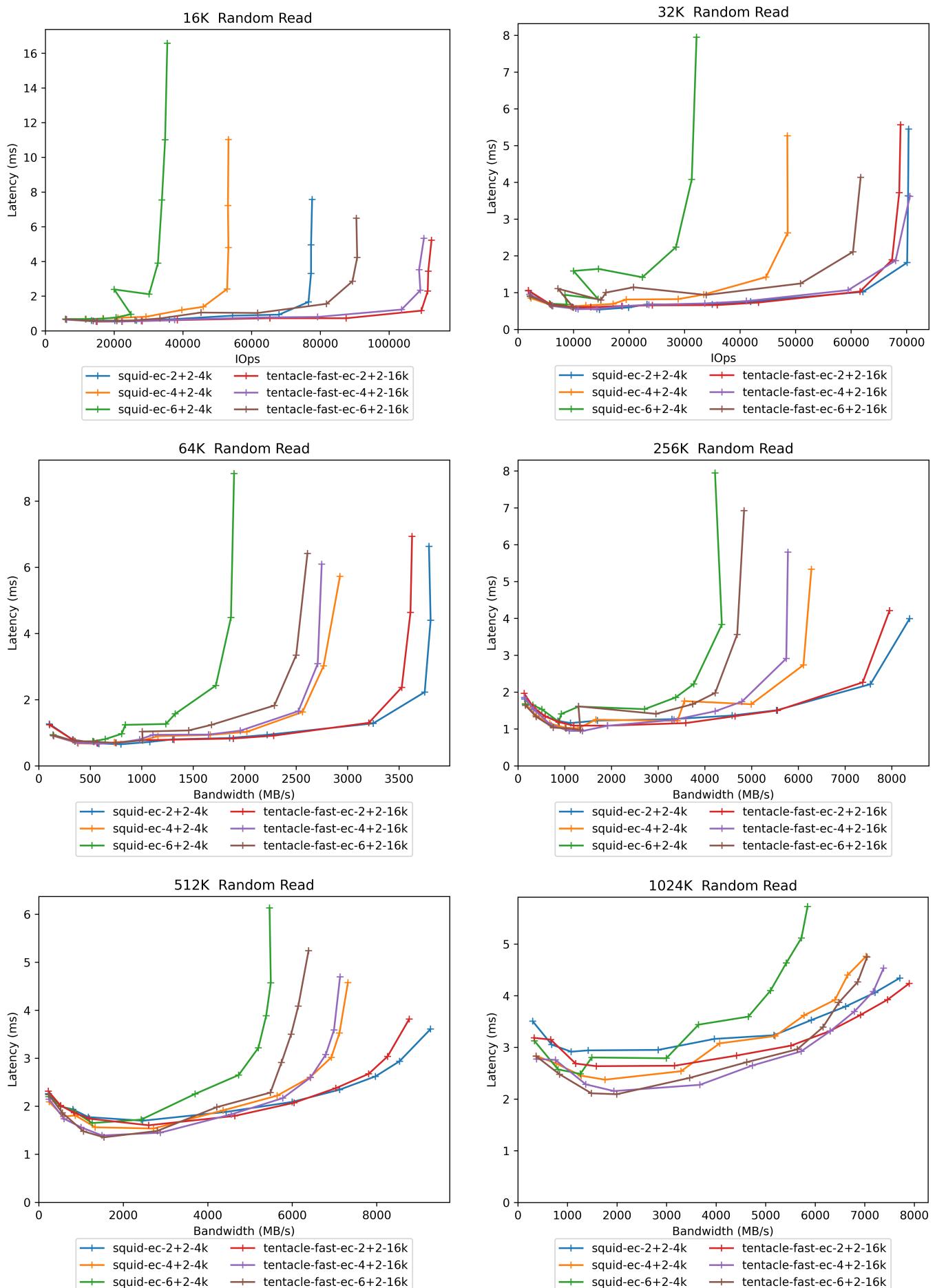
Sequential Write



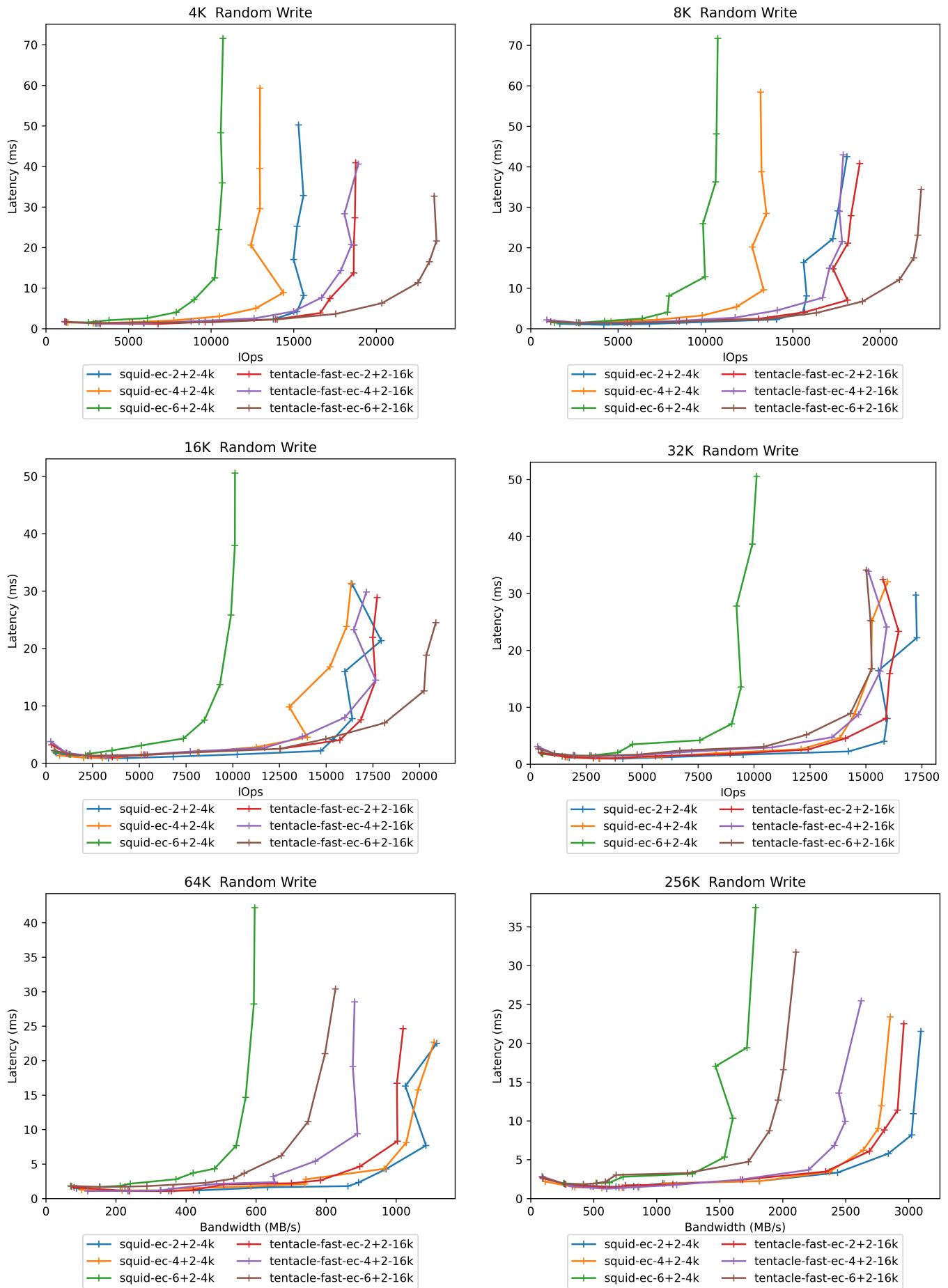


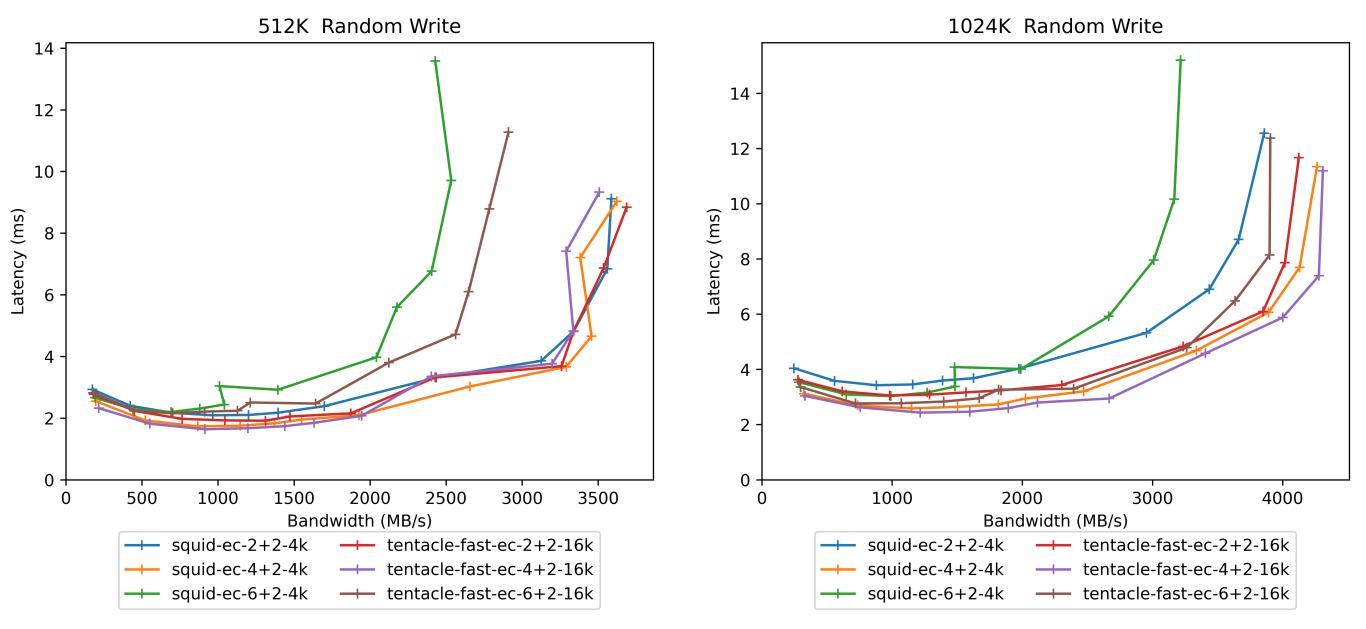
Random Read



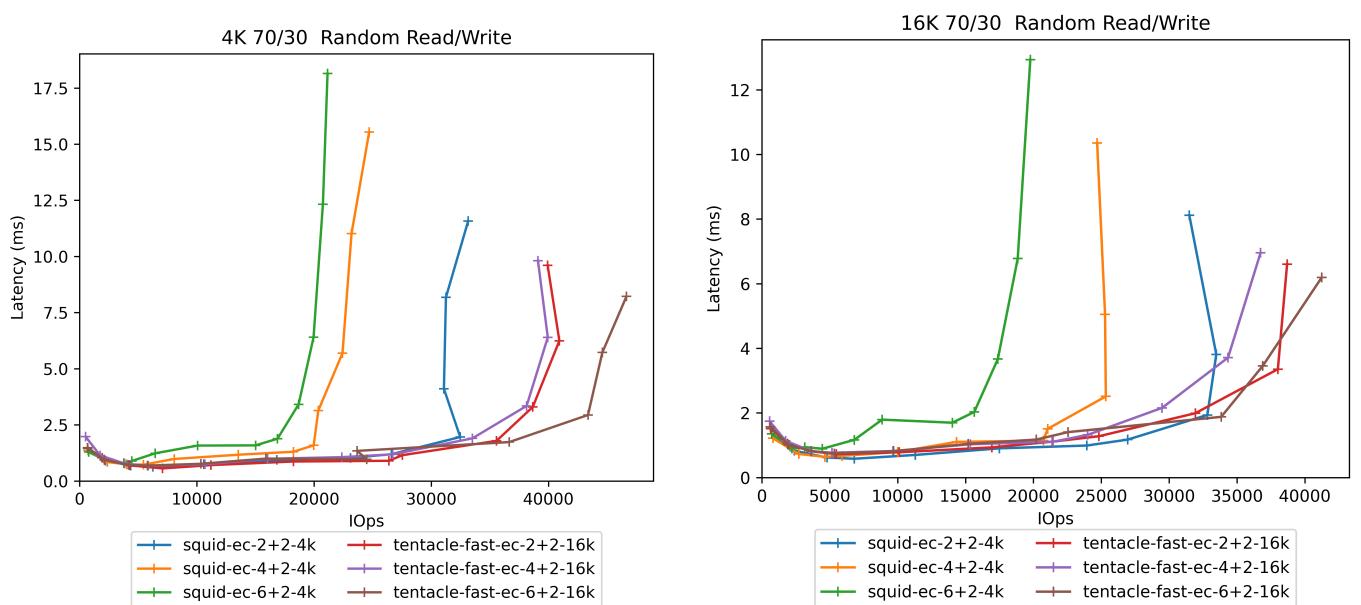


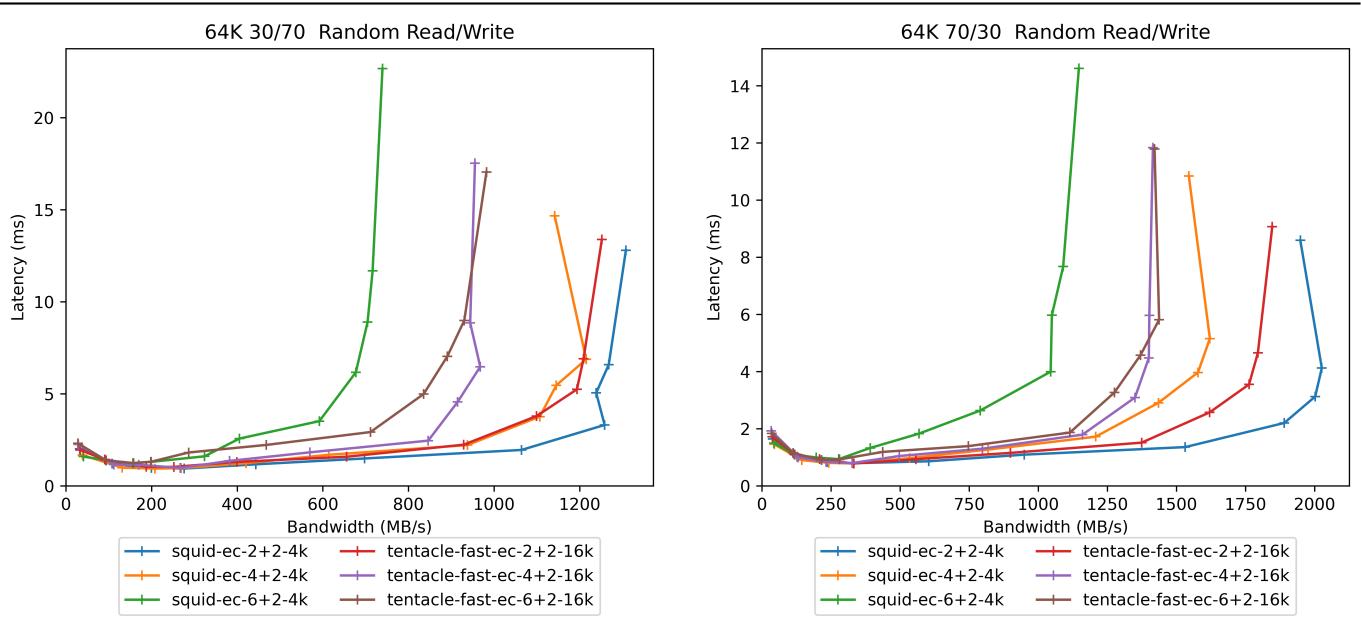
Random Write





Random Read/Write





Configuration yaml files

Only yaml files that differ by more than 20 lines from the yaml file for the baseline directory will be added here in addition to the baseline yaml

results

```
librbd_fio:  
  cmd_path: /usr/local/bin/fio  
  fio_out_format: json  
  log_avg_msec: 100  
  log_bw: true  
  log_iops: true  
  log_lat: true  
  norandommap: true  
  osd_ra:  
    - 4096  
  poolname: rbd_replicated  
  prefill:  
    blocksize: 64k  
    numjobs: 1  
  procs_per_volume:  
    - 1  
  ramp: 30  
  rbdname: cbt-librbd_fio  
  time: 90  
  time_based: true  
  use_existing_volumes: true  
  vol_size: 912500  
  volumes_per_client:  
    - 16  
  workloads:  
    16k7030:  
      jobname: randmix  
      mode: randrw  
      numjobs:  
        - 1  
      op_size: 16384  
      rwmixread: 70  
      total_iodepth:  
        - 1  
        - 2  
        - 3  
        - 4  
        - 8  
        - 16  
        - 24  
        - 32  
        - 64  
        - 128  
        - 256  
    16krandomread:  
      jobname: randread  
      mode: randread  
      numjobs:  
        - 1  
      op_size: 16384  
      total_iodepth:  
        - 4  
        - 8  
        - 12  
        - 16  
        - 24  
        - 48  
        - 64  
        - 128  
        - 256  
        - 384
```

```
- 588
16krandomwrite:
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
  op_size: 16384
  total_iodepth:
    - 1
    - 2
    - 3
    - 4
    - 8
    - 16
    - 32
    - 64
    - 128
    - 256
    - 384
    - 512
1Mrandomread:
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 1048576
  total_iodepth:
    - 1
    - 2
    - 3
    - 4
    - 8
    - 12
    - 16
    - 20
    - 24
    - 28
    - 32
1Mrandomwrite:
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
  op_size: 1048576
  total_iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 8
    - 16
    - 24
    - 32
    - 48
1Mseqread:
  jobname: seqread
  mode: read
  numjobs:
    - 1
  op_size: 1048576
  total_iodepth:
```

```
- 1
- 2
- 3
- 4
- 6
- 8
- 10
- 12
- 14
- 16
- 20
1Mseqwrite:
  jobname: seqwrite
  mode: write
  numjobs:
  - 1
  op_size: 1048576
  total_iodepth:
  - 2
  - 4
  - 6
  - 8
  - 16
  - 32
  - 48
  - 64
  - 96
  - 128
  - 160
256krandomread:
  jobname: randread
  mode: randread
  numjobs:
  - 1
  op_size: 262144
  total_iodepth:
  - 1
  - 2
  - 3
  - 4
  - 5
  - 8
  - 16
  - 24
  - 32
  - 64
  - 128
256krandomwrite:
  jobname: randwrite
  mode: randwrite
  numjobs:
  - 1
  op_size: 262144
  total_iodepth:
  - 1
  - 2
  - 3
  - 4
  - 5
  - 8
  - 16
  - 32
  - 64
```

```
- 96
- 128
- 256
32krandomread:
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 32768
  total_iodepth:
    - 2
    - 4
    - 6
    - 8
    - 12
    - 16
    - 24
    - 32
    - 64
    - 128
    - 256
    - 384
32krandomwrite:
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
  op_size: 32768
  total_iodepth:
    - 1
    - 2
    - 3
    - 4
    - 8
    - 16
    - 32
    - 64
    - 128
    - 256
    - 384
    - 512
4k7030:
  jobname: randmix
  mode: randrw
  numjobs:
    - 1
  op_size: 4096
  rwmixread: 70
  total_iodepth:
    - 1
    - 2
    - 3
    - 4
    - 8
    - 16
    - 24
    - 32
    - 64
    - 128
    - 256
    - 384
4krandomread:
  jobname: randread
```

```
mode: randread
numjobs:
- 1
op_size: 4096
total_iodepth:
- 4
- 8
- 12
- 16
- 32
- 48
- 64
- 128
- 256
- 384
- 588
- 768
4krandomwrite:
jobname: randwrite
mode: randwrite
numjobs:
- 1
op_size: 4096
total_iodepth:
- 2
- 4
- 8
- 16
- 32
- 64
- 128
- 256
- 384
- 512
- 768
512krandomread:
jobname: randread
mode: randread
numjobs:
- 1
op_size: 524288
total_iodepth:
- 1
- 2
- 3
- 4
- 8
- 16
- 24
- 32
- 40
- 48
- 64
512krandomwrite:
jobname: randwrite
mode: randwrite
numjobs:
- 1
op_size: 524288
total_iodepth:
- 1
- 2
- 3
```

```
- 4
- 5
- 6
- 8
- 16
- 24
- 32
- 48
- 64
512kseqread:
  jobname: seqread
  mode: read
  numjobs:
    - 1
  op_size: 524288
  total_iodepth:
    - 1
    - 2
    - 3
    - 4
    - 6
    - 8
    - 12
    - 16
    - 20
    - 24
    - 32
512kseqwrite:
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
  op_size: 524288
  total_iodepth:
    - 1
    - 2
    - 4
    - 6
    - 8
    - 16
    - 32
    - 48
    - 64
    - 96
    - 128
64k3070:
  jobname: randmix
  mode: randrw
  numjobs:
    - 1
  op_size: 65536
  rwmixread: 30
  total_iodepth:
    - 1
    - 2
    - 3
    - 4
    - 8
    - 16
    - 32
    - 64
    - 96
    - 128
```

```
- 256
64k7030:
  jobname: randmix
  mode: randrw
  numjobs:
    - 1
  op_size: 65536
  rwmixread: 70
  total_iodepth:
    - 1
    - 2
    - 3
    - 4
    - 8
    - 16
    - 32
    - 64
    - 96
    - 128
    - 256
64krandomread:
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 65536
  total_iodepth:
    - 2
    - 4
    - 6
    - 8
    - 12
    - 16
    - 24
    - 32
    - 64
    - 128
    - 256
    - 384
64krandomwrite:
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
  op_size: 65536
  total_iodepth:
    - 2
    - 4
    - 6
    - 8
    - 16
    - 24
    - 32
    - 64
    - 128
    - 256
    - 384
64kseqread:
  jobname: read
  mode: read
  numjobs:
    - 1
  op_size: 65536
```

```
total_iodepth:
  - 2
  - 4
  - 6
  - 8
  - 16
  - 24
  - 32
  - 64
  - 128
  - 192
  - 256
64kseqwrite:
  jobname: write
  mode: write
  numjobs:
    - 1
  op_size: 65536
  total_iodepth:
    - 4
    - 8
    - 12
    - 16
    - 32
    - 48
    - 64
    - 128
    - 256
    - 384
    - 512
8krandomread:
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 8192
  total_iodepth:
    - 4
    - 8
    - 12
    - 16
    - 32
    - 48
    - 64
    - 128
    - 256
    - 384
    - 588
    - 768
8krandomwrite:
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
  op_size: 8192
  total_iodepth:
    - 2
    - 4
    - 8
    - 16
    - 32
    - 64
    - 128
```

```
- 256
- 384
- 512
- 768
precondition:
  jobname: precond1rw
  mode: randwrite
  monitor: false
  numjobs:
    - 1
  op_size: 65536
  time: 600
  total_iodepth:
    - 16
seq16kread:
  jobname: seqread
  mode: read
  numjobs:
    - 1
  op_size: 16384
  total_iodepth:
    - 2
    - 4
    - 8
    - 12
    - 16
    - 24
    - 32
    - 64
    - 96
    - 128
    - 192
    - 288
seq16kwrite:
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
  op_size: 16384
  total_iodepth:
    - 2
    - 4
    - 8
    - 16
    - 32
    - 48
    - 64
    - 128
    - 256
    - 384
    - 512
    - 768
    - 1024
seq256kread:
  jobname: seqread
  mode: read
  numjobs:
    - 1
  op_size: 262144
  total_iodepth:
    - 1
    - 2
    - 3
```

```
- 4
- 5
- 8
- 16
- 24
- 32
- 48
- 64
seq256kwrite:
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
  op_size: 262144
  total_iodepth:
    - 1
    - 2
    - 4
    - 8
    - 16
    - 24
    - 32
    - 64
    - 96
    - 128
    - 256
seq32kread:
  jobname: seqread
  mode: read
  numjobs:
    - 1
  op_size: 32768
  total_iodepth:
    - 2
    - 4
    - 8
    - 12
    - 16
    - 24
    - 32
    - 64
    - 96
    - 128
    - 192
seq32kwrite:
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
  op_size: 32768
  total_iodepth:
    - 2
    - 4
    - 8
    - 16
    - 32
    - 64
    - 128
    - 256
    - 512
    - 768
seq4kread:
  jobname: seqread
```

```
mode: read
numjobs:
- 1
op_size: 4096
total_iodepth:
- 2
- 4
- 8
- 12
- 16
- 24
- 32
- 64
- 96
- 128
- 192
- 288
- 384
seq4kwrite:
jobname: seqwrite
mode: write
numjobs:
- 1
op_size: 4096
total_iodepth:
- 2
- 8
- 16
- 24
- 32
- 48
- 64
- 128
- 256
- 384
- 512
- 768
- 1024
- 1280
- 1536
seq8kread:
jobname: seqread
mode: read
numjobs:
- 1
op_size: 8192
total_iodepth:
- 2
- 4
- 8
- 12
- 16
- 24
- 32
- 64
- 96
- 128
- 192
- 288
- 384
seq8kwrite:
jobname: seqwrite
mode: write
```

```
numjobs:
  - 1
  op_size: 8192
  total_iodepth:
    - 2
    - 8
    - 16
    - 24
    - 32
    - 48
    - 64
    - 128
    - 256
    - 384
    - 512
    - 768
    - 1024
    - 1280
    - 1536
cluster:
  archive_dir: /tmp/cbt
  ceph-mgr_cmd: /usr/bin/ceph-mgr
  ceph-mon_cmd: /usr/bin/ceph-mon
  ceph-osd_cmd: /usr/bin/ceph-osd
  ceph-run_cmd: /usr/bin/ceph-run
  ceph_cmd: /usr/bin/ceph
  clients:
    - --- server1 ---
  clusterid: ceph
  conf_file: /cbt/ceph.conf.4x1x1.fs
  fs: xfs
  head: --- server1 ---
  iterations: 1
  mgrs:
    --- server1 ---:
      a: null
  mkfs_opts: -f -i size=2048
  mons:
    --- server1 ---:
      a: --- IP Address --:6789
  mount_opts: -o inode64,noatime,logbsize=256k
  osds:
    - --- server1 ---
    osds_per_node: 8
    pdsh_ssh_args: -a -x -l%u %h
    rados_cmd: /usr/bin/rados
    rbd_cmd: /usr/bin/rbd
    tmp_dir: /tmp/cbt
    use_existing: true
    user: ljsanders
  monitoring_profiles:
    collectl:
      args: -c 18 -sCD -i 10 -P -oz -F0 --rawtoo --sep ";" -f {collectl_dir}
  librbd_fio:
    cmd_path: /usr/local/bin/fio
    fio_out_format: json
    log_avg_msec: 100
    log_bw: true
    log_iops: true
    log_lat: true
    norandommap: true
    osd_ra:
```

```
- 4096
poolname: rbd_replicated
prefill:
  blocksize: 64k
  numjobs: 1
procs_per_volume:
- 1
ramp: 30
rbdname: cbt-librbdgio
time: 90
time_based: true
use_existing_volumes: true
vol_size: 912500
volumes_per_client:
- 16
workloads:
  16k7030:
    jobname: randmix
    mode: randrw
    numjobs:
      - 1
    op_size: 16384
    rwmixread: 70
    total_iodepth:
      - 1
      - 2
      - 3
      - 4
      - 8
      - 16
      - 24
      - 32
      - 64
      - 128
      - 256
  16krandomread:
    jobname: randread
    mode: randread
    numjobs:
      - 1
    op_size: 16384
    total_iodepth:
      - 4
      - 8
      - 12
      - 16
      - 24
      - 48
      - 64
      - 128
      - 256
      - 384
      - 588
  16krandomwrite:
    jobname: randwrite
    mode: randwrite
    numjobs:
      - 1
    op_size: 16384
    total_iodepth:
      - 1
      - 2
      - 3
```

```
- 4
- 8
- 16
- 32
- 64
- 128
- 256
- 384
- 512
1Mrandomread:
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 1048576
  total_iodepth:
    - 1
    - 2
    - 3
    - 4
    - 8
    - 12
    - 16
    - 20
    - 24
    - 28
    - 32
1Mrandomwrite:
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
  op_size: 1048576
  total_iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 8
    - 16
    - 24
    - 32
    - 48
1Mseqread:
  jobname: seqread
  mode: read
  numjobs:
    - 1
  op_size: 1048576
  total_iodepth:
    - 1
    - 2
    - 3
    - 4
    - 6
    - 8
    - 10
    - 12
    - 14
    - 16
    - 20
```

```
1Mseqwrite:  
  jobname: seqwrite  
  mode: write  
  numjobs:  
    - 1  
  op_size: 1048576  
  total_iodepth:  
    - 2  
    - 4  
    - 6  
    - 8  
    - 16  
    - 32  
    - 48  
    - 64  
    - 96  
    - 128  
    - 160  
256krandomread:  
  jobname: randread  
  mode: randread  
  numjobs:  
    - 1  
  op_size: 262144  
  total_iodepth:  
    - 1  
    - 2  
    - 3  
    - 4  
    - 5  
    - 8  
    - 16  
    - 24  
    - 32  
    - 64  
    - 128  
256krandomwrite:  
  jobname: randwrite  
  mode: randwrite  
  numjobs:  
    - 1  
  op_size: 262144  
  total_iodepth:  
    - 1  
    - 2  
    - 3  
    - 4  
    - 5  
    - 8  
    - 16  
    - 32  
    - 64  
    - 96  
    - 128  
    - 256  
32krandomread:  
  jobname: randread  
  mode: randread  
  numjobs:  
    - 1  
  op_size: 32768  
  total_iodepth:  
    - 2
```

```
- 4
- 6
- 8
- 12
- 16
- 24
- 32
- 64
- 128
- 256
- 384
32krandomwrite:
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
  op_size: 32768
  total_iodepth:
    - 1
    - 2
    - 3
    - 4
    - 8
    - 16
    - 32
    - 64
    - 128
    - 256
    - 384
    - 512
4k7030:
  jobname: randmix
  mode: randrw
  numjobs:
    - 1
  op_size: 4096
  rwmixread: 70
  total_iodepth:
    - 1
    - 2
    - 3
    - 4
    - 8
    - 16
    - 24
    - 32
    - 64
    - 128
    - 256
    - 384
4krandomread:
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 4096
  total_iodepth:
    - 4
    - 8
    - 12
    - 16
    - 32
    - 48
```

```
- 64
- 128
- 256
- 384
- 588
- 768
4krandomwrite:
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
  op_size: 4096
  total_iodepth:
    - 2
    - 4
    - 8
    - 16
    - 32
    - 64
    - 128
    - 256
    - 384
    - 512
    - 768
512krandomread:
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 524288
  total_iodepth:
    - 1
    - 2
    - 3
    - 4
    - 8
    - 16
    - 24
    - 32
    - 40
    - 48
    - 64
512krandomwrite:
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
  op_size: 524288
  total_iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 8
    - 16
    - 24
    - 32
    - 48
    - 64
512kseqread:
  jobname: seqread
```

```
mode: read
numjobs:
- 1
op_size: 524288
total_iodepth:
- 1
- 2
- 3
- 4
- 6
- 8
- 12
- 16
- 20
- 24
- 32
```

```
512kseqwrite:
jobname: seqwrite
mode: write
numjobs:
- 1
op_size: 524288
total_iodepth:
- 1
- 2
- 4
- 6
- 8
- 16
- 32
- 48
- 64
- 96
- 128
```

```
64k3070:
jobname: randmix
mode: randrw
numjobs:
- 1
op_size: 65536
rwmixread: 30
total_iodepth:
- 1
- 2
- 3
- 4
- 8
- 16
- 32
- 64
- 96
- 128
- 256
```

```
64k7030:
jobname: randmix
mode: randrw
numjobs:
- 1
op_size: 65536
rwmixread: 70
total_iodepth:
- 1
- 2
```

```
- 3
- 4
- 8
- 16
- 32
- 64
- 96
- 128
- 256
64krandomread:
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 65536
  total_iodepth:
    - 2
    - 4
    - 6
    - 8
    - 12
    - 16
    - 24
    - 32
    - 64
    - 128
    - 256
    - 384
64krandomwrite:
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
  op_size: 65536
  total_iodepth:
    - 2
    - 4
    - 6
    - 8
    - 16
    - 24
    - 32
    - 64
    - 128
    - 256
    - 384
64kseqread:
  jobname: read
  mode: read
  numjobs:
    - 1
  op_size: 65536
  total_iodepth:
    - 2
    - 4
    - 6
    - 8
    - 16
    - 24
    - 32
    - 64
    - 128
    - 192
```

```
- 256
64kseqwrite:
  jobname: write
  mode: write
  numjobs:
    - 1
  op_size: 65536
  total_iodepth:
    - 4
    - 8
    - 12
    - 16
    - 32
    - 48
    - 64
    - 128
    - 256
    - 384
    - 512
8krandomread:
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 8192
  total_iodepth:
    - 4
    - 8
    - 12
    - 16
    - 32
    - 48
    - 64
    - 128
    - 256
    - 384
    - 588
    - 768
8krandomwrite:
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
  op_size: 8192
  total_iodepth:
    - 2
    - 4
    - 8
    - 16
    - 32
    - 64
    - 128
    - 256
    - 384
    - 512
    - 768
precondition:
  jobname: precond1rw
  mode: randwrite
  monitor: false
  numjobs:
    - 1
  op_size: 65536
```

```
time: 600
total_iodepth:
- 16
seq16kread:
  jobname: seqread
  mode: read
  numjobs:
- 1
  op_size: 16384
  total_iodepth:
- 2
- 4
- 8
- 12
- 16
- 24
- 32
- 64
- 96
- 128
- 192
- 288
seq16kwrite:
  jobname: seqwrite
  mode: write
  numjobs:
- 1
  op_size: 16384
  total_iodepth:
- 2
- 4
- 8
- 16
- 32
- 48
- 64
- 128
- 256
- 384
- 512
- 768
- 1024
seq256kread:
  jobname: seqread
  mode: read
  numjobs:
- 1
  op_size: 262144
  total_iodepth:
- 1
- 2
- 3
- 4
- 5
- 8
- 16
- 24
- 32
- 48
- 64
seq256kwrite:
  jobname: seqwrite
  mode: write
```

```
numjobs:
- 1
op_size: 262144
total_iodepth:
- 1
- 2
- 4
- 8
- 16
- 24
- 32
- 64
- 96
- 128
- 256
seq32kread:
  jobname: seqread
  mode: read
  numjobs:
    - 1
  op_size: 32768
  total_iodepth:
    - 2
    - 4
    - 8
    - 12
    - 16
    - 24
    - 32
    - 64
    - 96
    - 128
    - 192
seq32kwrite:
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
  op_size: 32768
  total_iodepth:
    - 2
    - 4
    - 8
    - 16
    - 32
    - 64
    - 128
    - 256
    - 512
    - 768
seq4kread:
  jobname: seqread
  mode: read
  numjobs:
    - 1
  op_size: 4096
  total_iodepth:
    - 2
    - 4
    - 8
    - 12
    - 16
    - 24
```

```
- 32
- 64
- 96
- 128
- 192
- 288
- 384
seq4kwrite:
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
  op_size: 4096
  total_iodepth:
    - 2
    - 8
    - 16
    - 24
    - 32
    - 48
    - 64
    - 128
    - 256
    - 384
    - 512
    - 768
    - 1024
    - 1280
    - 1536
seq8kread:
  jobname: seqread
  mode: read
  numjobs:
    - 1
  op_size: 8192
  total_iodepth:
    - 2
    - 4
    - 8
    - 12
    - 16
    - 24
    - 32
    - 64
    - 96
    - 128
    - 192
    - 288
    - 384
seq8kwrite:
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
  op_size: 8192
  total_iodepth:
    - 2
    - 8
    - 16
    - 24
    - 32
    - 48
    - 64
```

```
- 128
- 256
- 384
- 512
- 768
- 1024
- 1280
- 1536
cluster:
  archive_dir: /tmp/cbt
  ceph-mgr_cmd: /usr/bin/ceph-mgr
  ceph-mon_cmd: /usr/bin/ceph-mon
  ceph-osd_cmd: /usr/bin/ceph-osd
  ceph-run_cmd: /usr/bin/ceph-run
  ceph_cmd: /usr/bin/ceph
  clients:
    - --- server1 ---
  clusterid: ceph
  conf_file: /cbt/ceph.conf.4x1x1.fs
  fs: xfs
  head: --- server1 ---
  iterations: 1
  mgrs:
    --- server1 ---:
      a: null
  mkfs_opts: -f -i size=2048
  mons:
    --- server1 ---:
      a: --- IP Address --:6789
  mount_opts: -o inode64,noatime,logbsize=256k
  osds:
    - --- server1 ---
    osds_per_node: 8
    pdsh_ssh_args: -a -x -l%u %h
    rados_cmd: /usr/bin/rados
    rbd_cmd: /usr/bin/rbd
    tmp_dir: /tmp/cbt
    use_existing: true
    user: ljsanders
  monitoring_profiles:
    collectl:
      args: -c 18 -sCD -i 10 -P -oz -F0 --rawtoo --sep ";" -f {collectl_dir}
```