

# Performance Report for 13th-Oct-Clay-4+2+5

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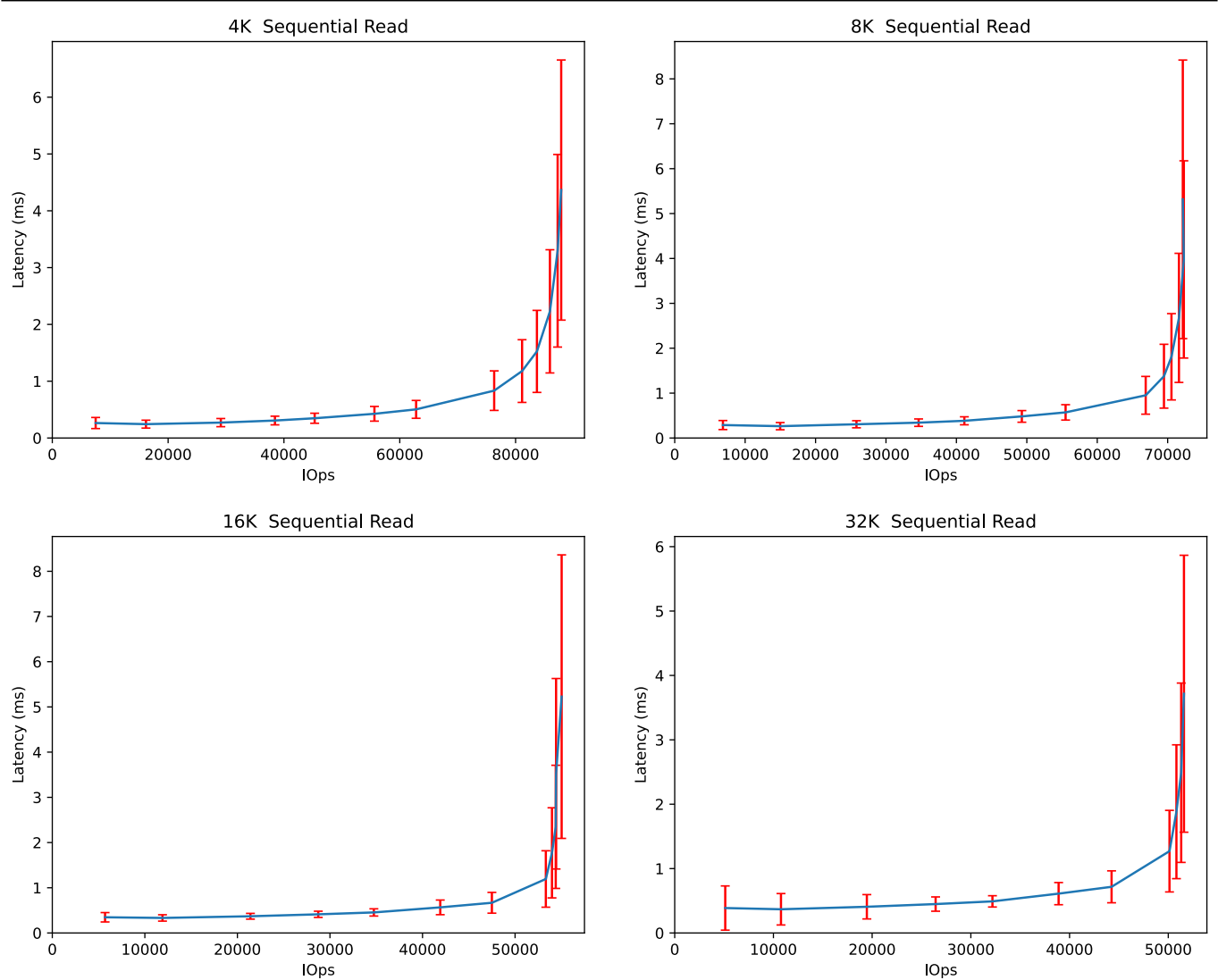
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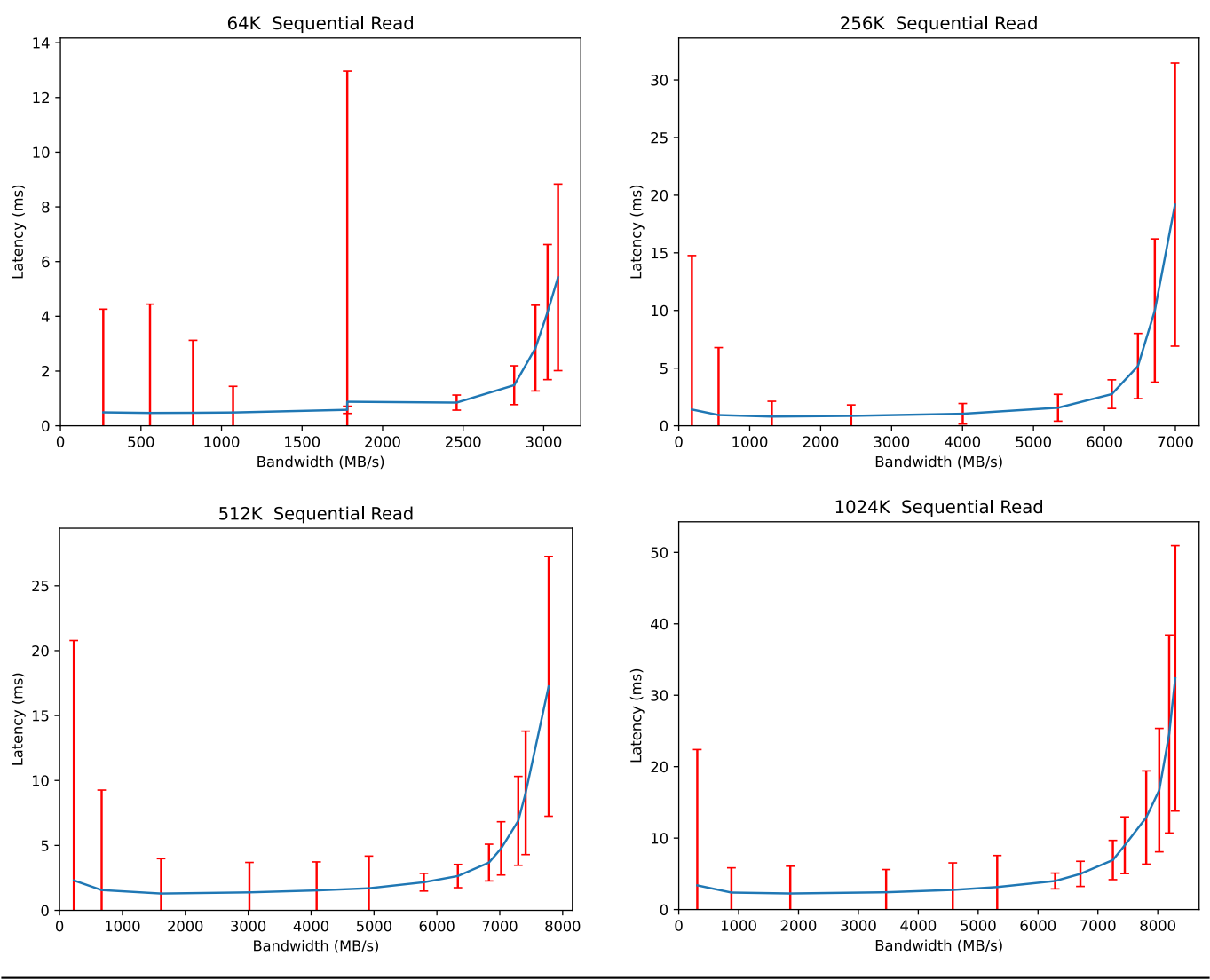
# Summary of results for 13th-Oct-Clay-4+2+5

Workload Name	Maximum Throughput	Latency (ms)
4096_read	87877 IOps	4.4
8192_read	72298 IOps	4.0
16384_read	55032 IOps	5.2
32768_read	51589 IOps	3.7
65536_read	3089 MB/s	5.4
262144_read	6994 MB/s	19.2
524288_read	7777 MB/s	17.3
1048576_read	8291 MB/s	32.4
4096_write	141273 IOps	10.9
8192_write	132408 IOps	11.6
16384_write	101082 IOps	10.1
32768_write	59256 IOps	12.9
65536_write	2134 MB/s	15.7
262144_write	2854 MB/s	23.4
524288_write	2991 MB/s	22.2
1048576_write	3827 MB/s	43.3
4096_randread	57229 IOps	13.4
8192_randread	57551 IOps	13.3
16384_randread	56699 IOps	10.4
32768_randread	52854 IOps	9.7
65536_randread	3095 MB/s	5.4
262144_randread	6282 MB/s	5.3
524288_randread	7829 MB/s	34.3
1048576_randread	8288 MB/s	32.4
4096_randwrite	14376 IOps	8.9
8192_randwrite	13252 IOps	58.0
16384_randwrite	15984 IOps	32.0
32768_randwrite	15584 IOps	24.6
65536_randwrite	1084 MB/s	15.4
262144_randwrite	2736 MB/s	24.4
524288_randwrite	3275 MB/s	10.0
1048576_randwrite	3644 MB/s	13.3
4096_70_30_randrw	23192 IOps	2.7
16384_70_30_randrw	25855 IOps	9.9
65536_70_30_randrw	1548 MB/s	10.8
65536_30_70_randrw	1237 MB/s	13.5

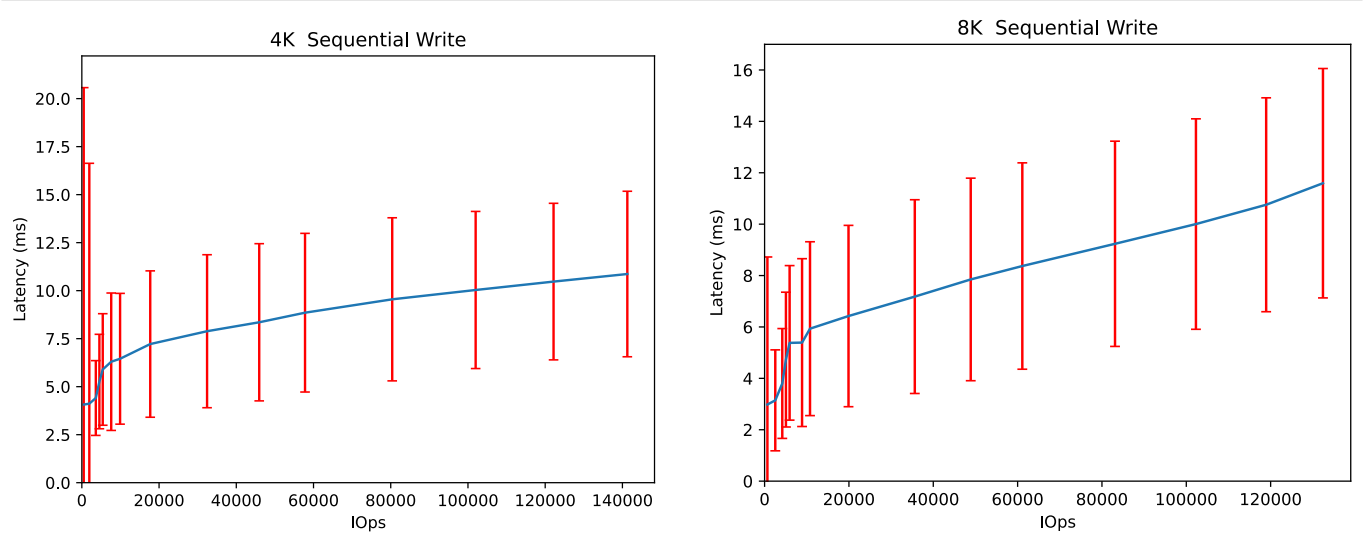
# Response Curves

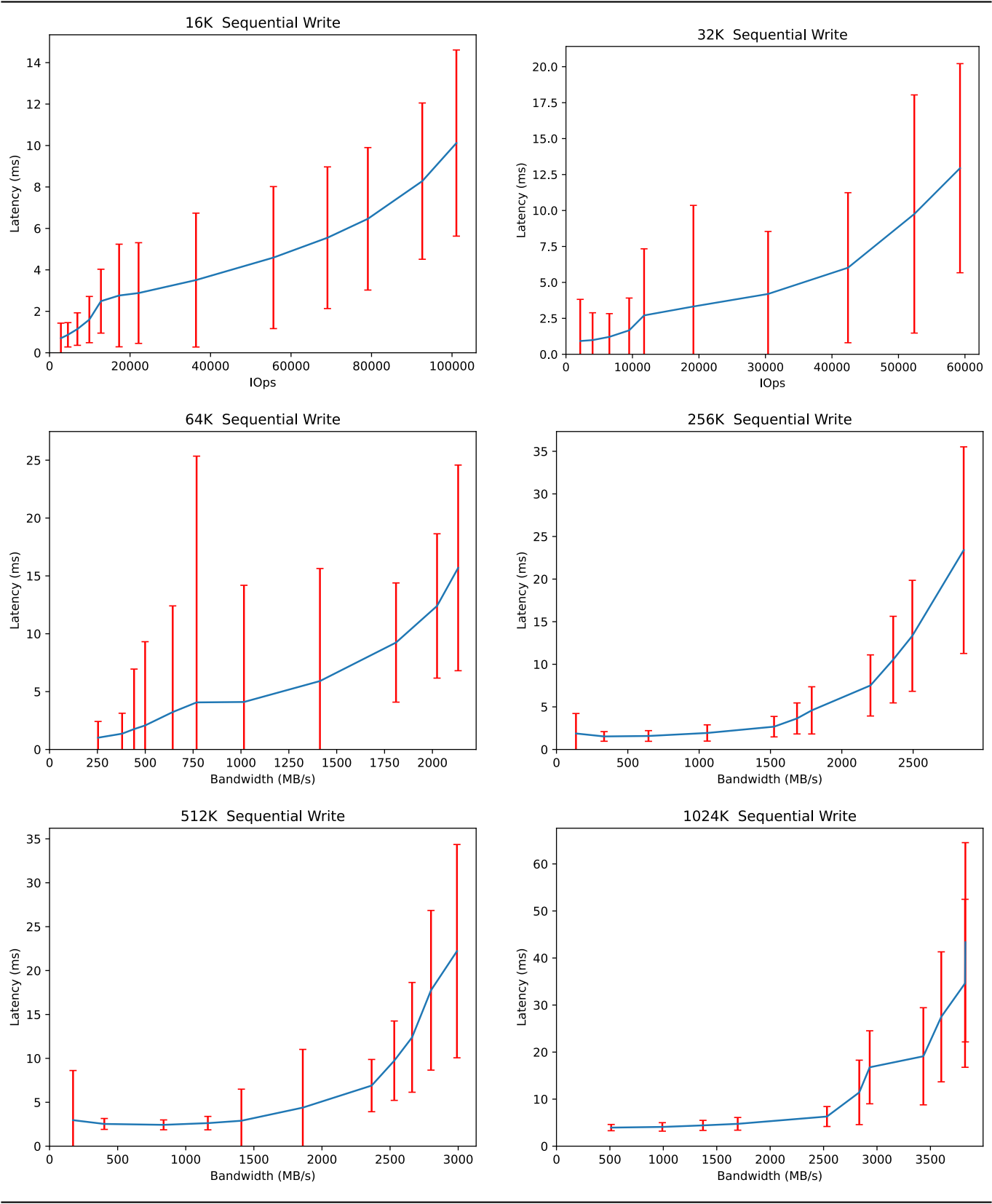
## Sequential Read



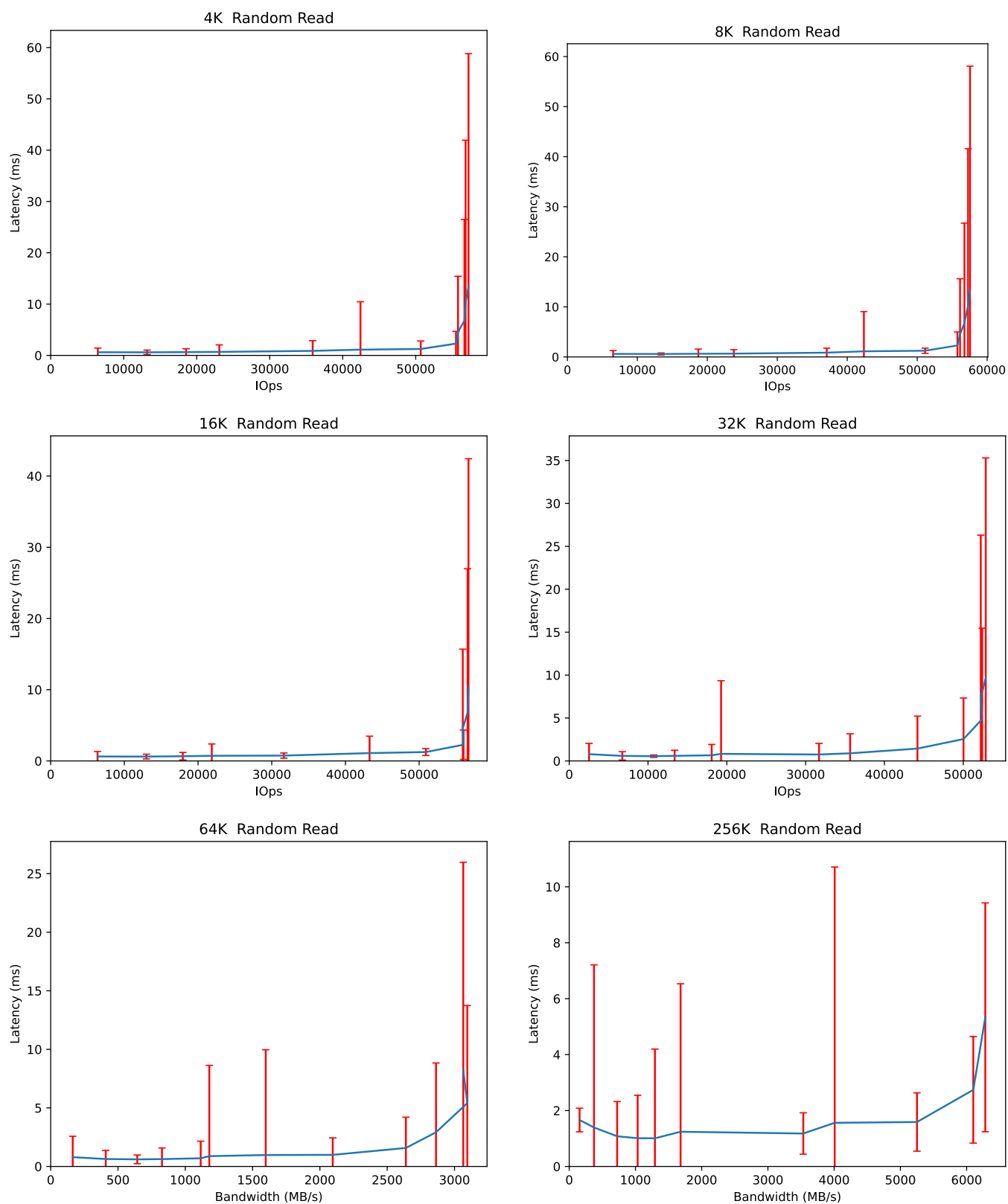


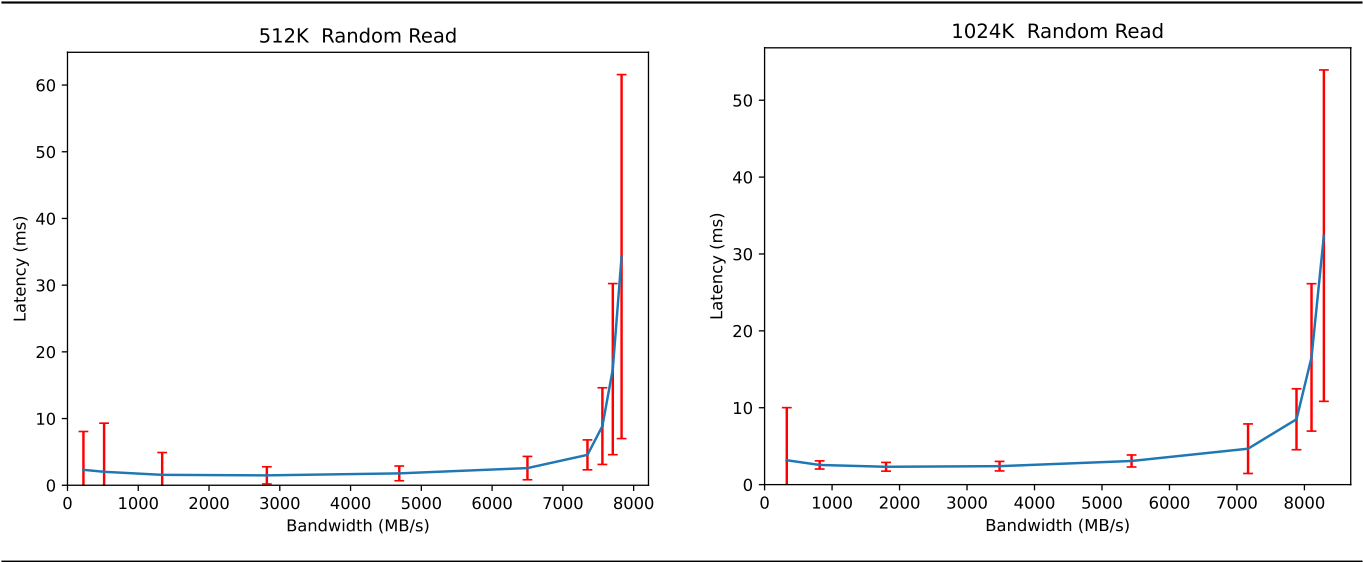
## Sequential Write



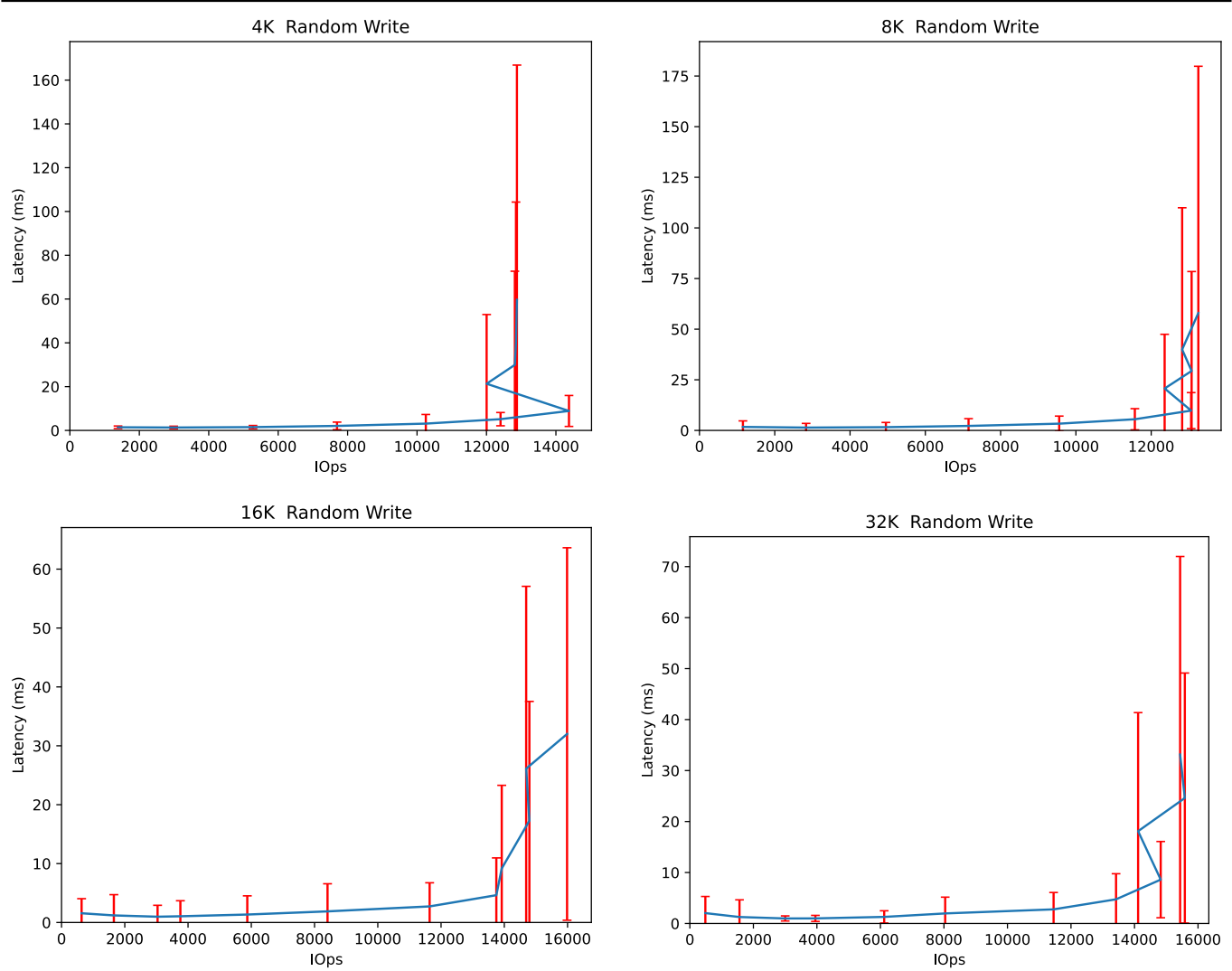


Random Read

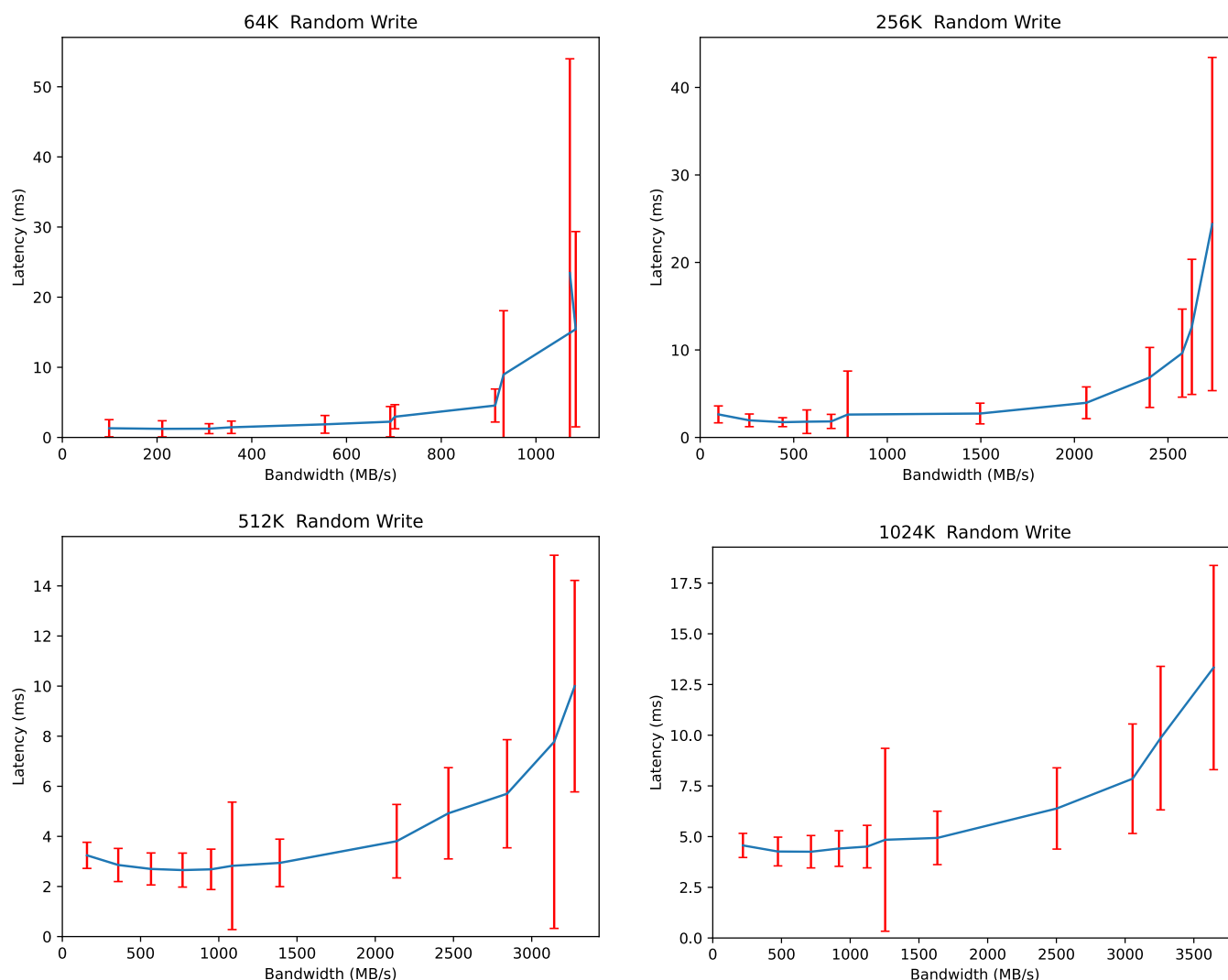




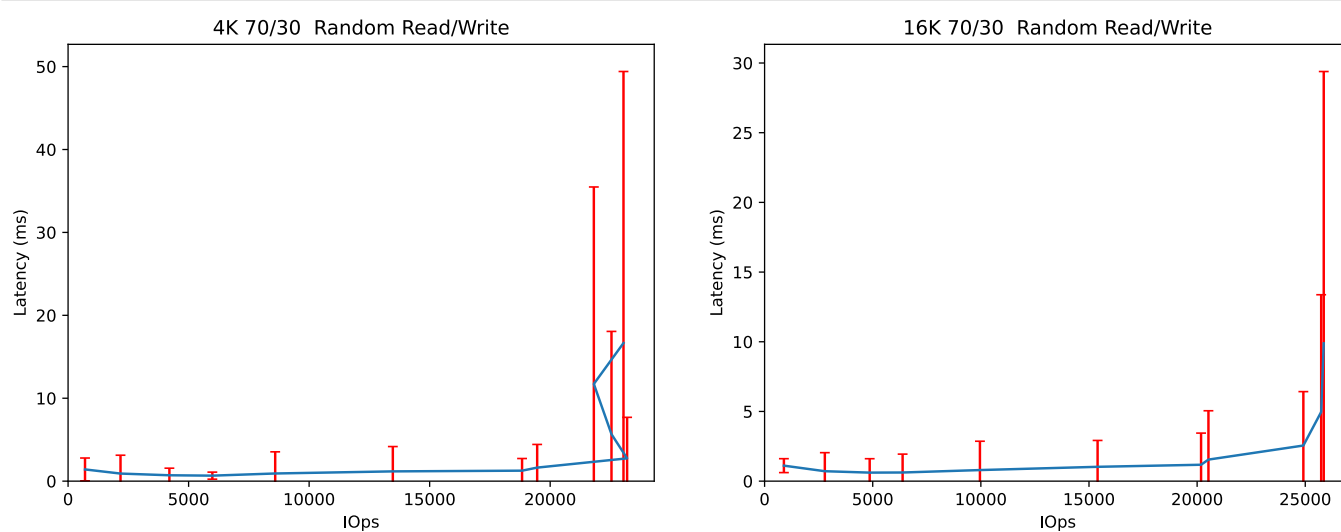
Random Write

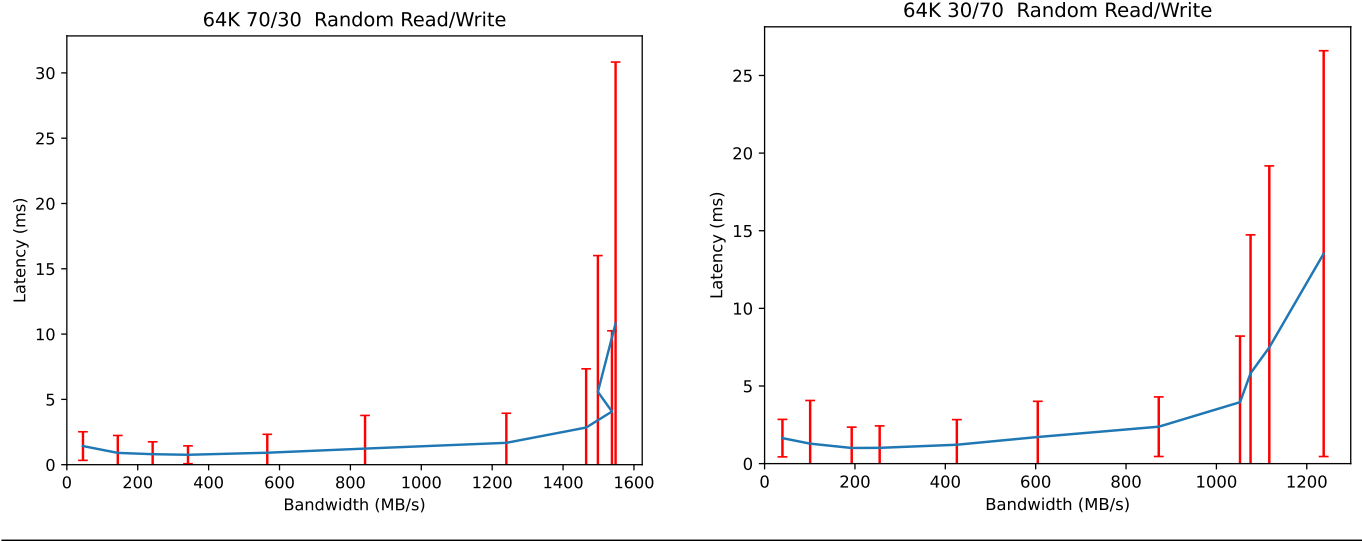






## Random Read/Write





# Configuration yaml

```

librbd fio:
  cmd_path: /usr/local/bin/fio
  create_report: true
  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: 1204500
  volumes_per_client:
    - 16
  wait_pgautoscaler_timeout: 20
  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
    16k randomread:
      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
      - 4
      - 8
      - 16
      - 32
      - 64
      - 128
      - 256
  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
    - 4
    - 8
    - 12
    - 16
    - 24
    - 32
    - 48
    - 64
    - 96
    - 128
    - 192
    - 256
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
  - 512
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
    - 4
    - 8
    - 16
    - 32
    - 64

```

```

- 128
- 256
- 512
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
    - 4
    - 8
    - 12
    - 16
    - 24
    - 32
    - 48
    - 64
    - 96
    - 128
    - 256
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
    - 4
    - 8
    - 16
    - 32
    - 64
    - 128
    - 256
    - 512
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:
  collect1:
    args: -c 18 -sCD -i 10 -P -oz -F0 --rawtoo --sep ";" -f {collect1_dir}
```