

Comparative Performance Report for cbt-19thJan-main-4k-8vol vs cbt-3rdFeb-alexls20-econ-4k-8vol

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 - results

Comparison summary for cbt-19thJan-main-4k-8vol vs cbt-3rdFeb-alexls20-econ-4k-8vol

Sequential Read	cbt_19thJan_main_4k_8vol	cbt_3rdFeb_alexls20_econ_4k_8vol	%change throughput	%change latency
4K	67664 IOps@2.8ms	64493 IOps@2.5ms	-5%	-11%
8K	40485 IOps@4.7ms	38690 IOps@3.3ms	-4%	-30%
16K	23113 IOps@8.3ms	22156 IOps@5.8ms	-4%	-30%
32K	19243 IOps@10.0ms	18303 IOps@7.0ms	-5%	-30%
64K	1165 MB/s@14.4ms	1079 MB/s@9.7ms	-7%	-33%
256K	1532 MB/s@15.1ms	1544 MB/s@14.9ms	1%	-1%
512K	1560 MB/s@26.9ms	1569 MB/s@29.4ms	1%	9%
1024K	1573 MB/s@58.7ms	1576 MB/s@58.6ms	0%	-0%

Sequential Write	cbt_19thJan_main_4k_8vol	cbt_3rdFeb_alexls20_econ_4k_8vol	%change throughput	%change latency
4K	3077 IOps@52.1ms	5569 IOps@28.7ms	81%	-45%
8K	2694 IOps@83.5ms	5139 IOps@31.1ms	91%	-63%
16K	7338 IOps@26.1ms	6848 IOps@18.7ms	-7%	-28%
32K	9342 IOps@13.7ms	9229 IOps@13.8ms	-1%	1%
64K	217 MB/s@14.5ms	258 MB/s@20.3ms	19%	40%
256K	565 MB/s@7.3ms	485 MB/s@4.2ms	-14%	-42%
512K	483 MB/s@95.4ms	462 MB/s@90.6ms	-4%	-5%
1024K	513 MB/s@64.9ms	502 MB/s@133.3ms	-2%	105%

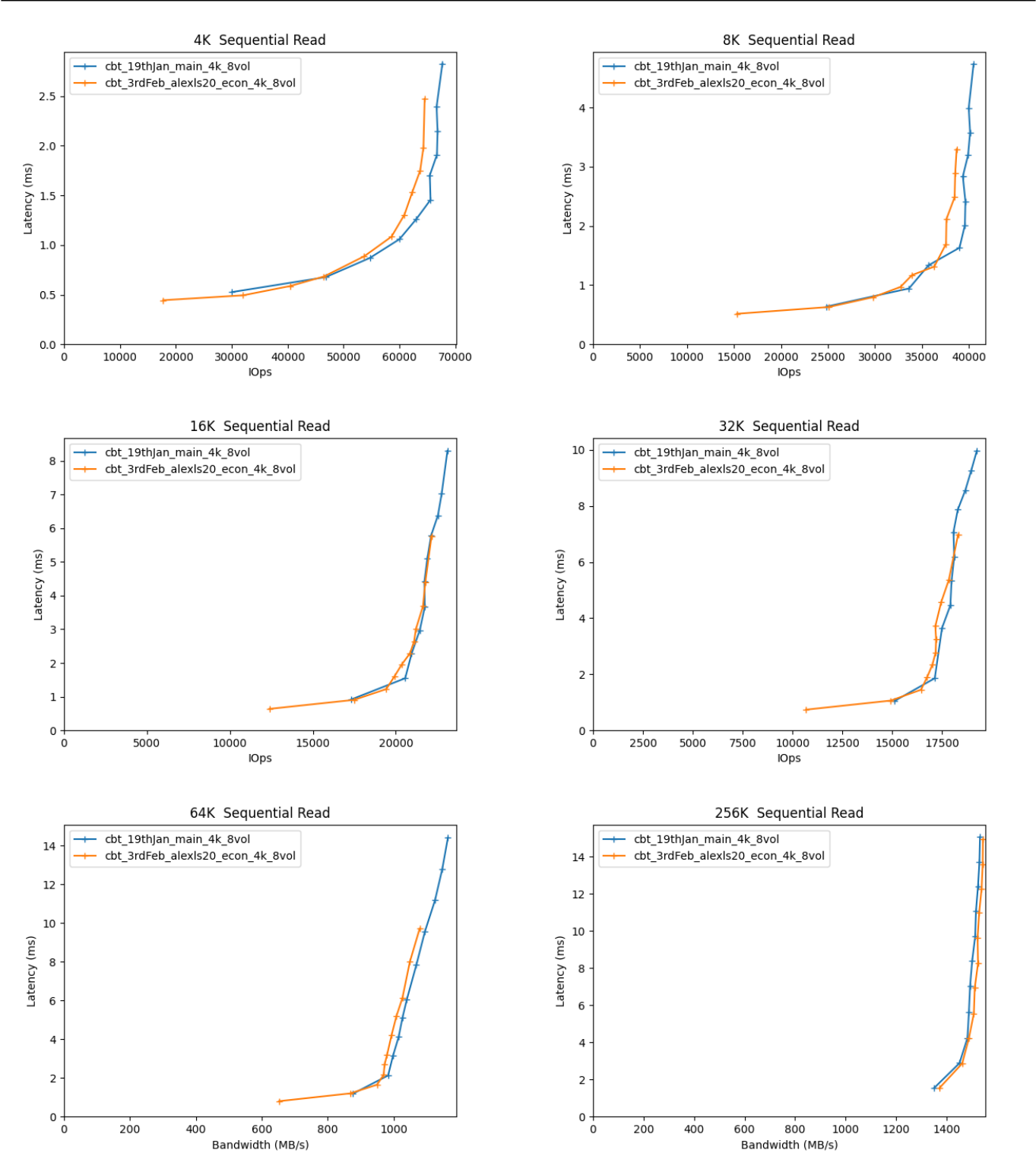
Random Read	cbt_19thJan_main_4k_8vol	cbt_3rdFeb_alexls20_econ_4k_8vol	%change throughput	%change latency
4K	82195 IOps@4.7ms	80353 IOps@4.8ms	-2%	2%
8K	53162 IOps@7.2ms	51630 IOps@7.4ms	-3%	3%
16K	31401 IOps@12.2ms	31125 IOps@8.2ms	-1%	-33%
32K	28500 IOps@6.7ms	29143 IOps@8.8ms	2%	31%
64K	1552 MB/s@8.1ms	1574 MB/s@6.7ms	1%	-17%
256K	1704 MB/s@14.8ms	1699 MB/s@19.7ms	-0%	33%
512K	1702 MB/s@27.1ms	1696 MB/s@27.3ms	-0%	1%
1024K	1710 MB/s@54.1ms	1710 MB/s@54.0ms	0%	-0%

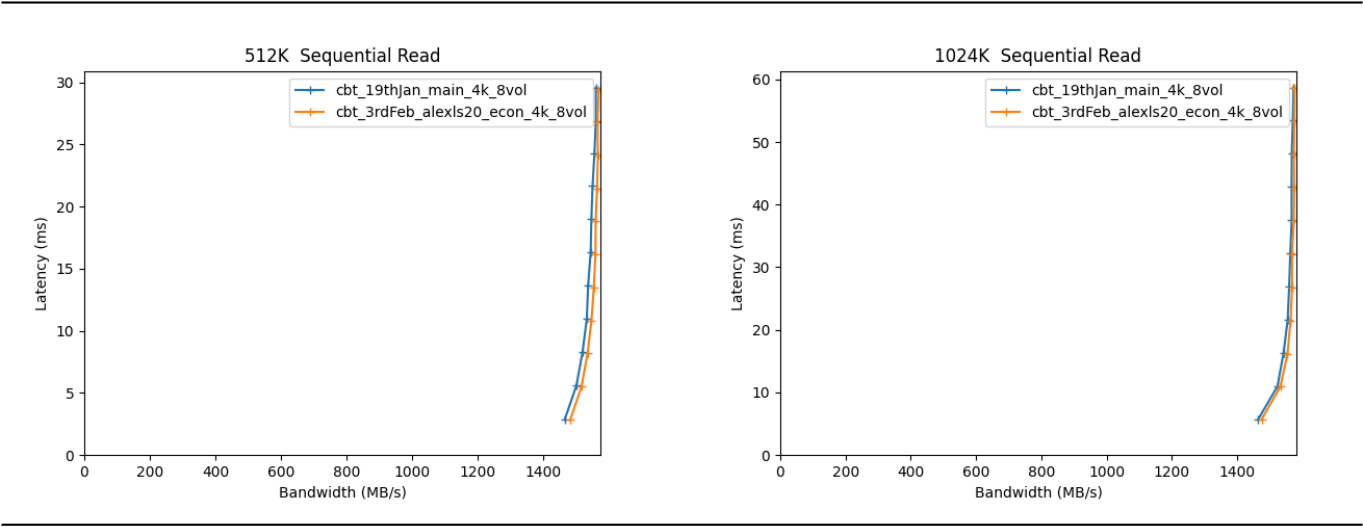
Random Write	cbt_19thJan_main_4k_8vol	cbt_3rdFeb_alexls20_econ_4k_8vol	%change throughput	%change latency
4K	2708 IOps@35.4ms	5740 IOps@11.1ms	112%	-69%
8K	2758 IOps@46.4ms	5689 IOps@22.5ms	106%	-52%
16K	5674 IOps@22.5ms	5349 IOps@14.9ms	-6%	-34%
32K	3530 IOps@36.3ms	3405 IOps@28.2ms	-4%	-22%
64K	199 MB/s@31.5ms	189 MB/s@44.2ms	-5%	40%
256K	415 MB/s@50.4ms	428 MB/s@58.6ms	3%	16%
512K	466 MB/s@80.7ms	478 MB/s@87.6ms	3%	9%
1024K	478 MB/s@139.8ms	506 MB/s@82.4ms	6%	-41%

Random Read/Write	cbt_19thJan_main_4k_8vol	cbt_3rdFeb_alexls20_econ_4k_8vol	%change throughput	%change latency
16K_70/30	7664 IOps@7.3ms	7401 IOps@5.4ms	-3%	-26%
64K_70/30	304 MB/s@27.6ms	285 MB/s@11.0ms	-6%	-60%
64K_30/70	246 MB/s@17.0ms	245 MB/s@23.5ms	-0%	38%

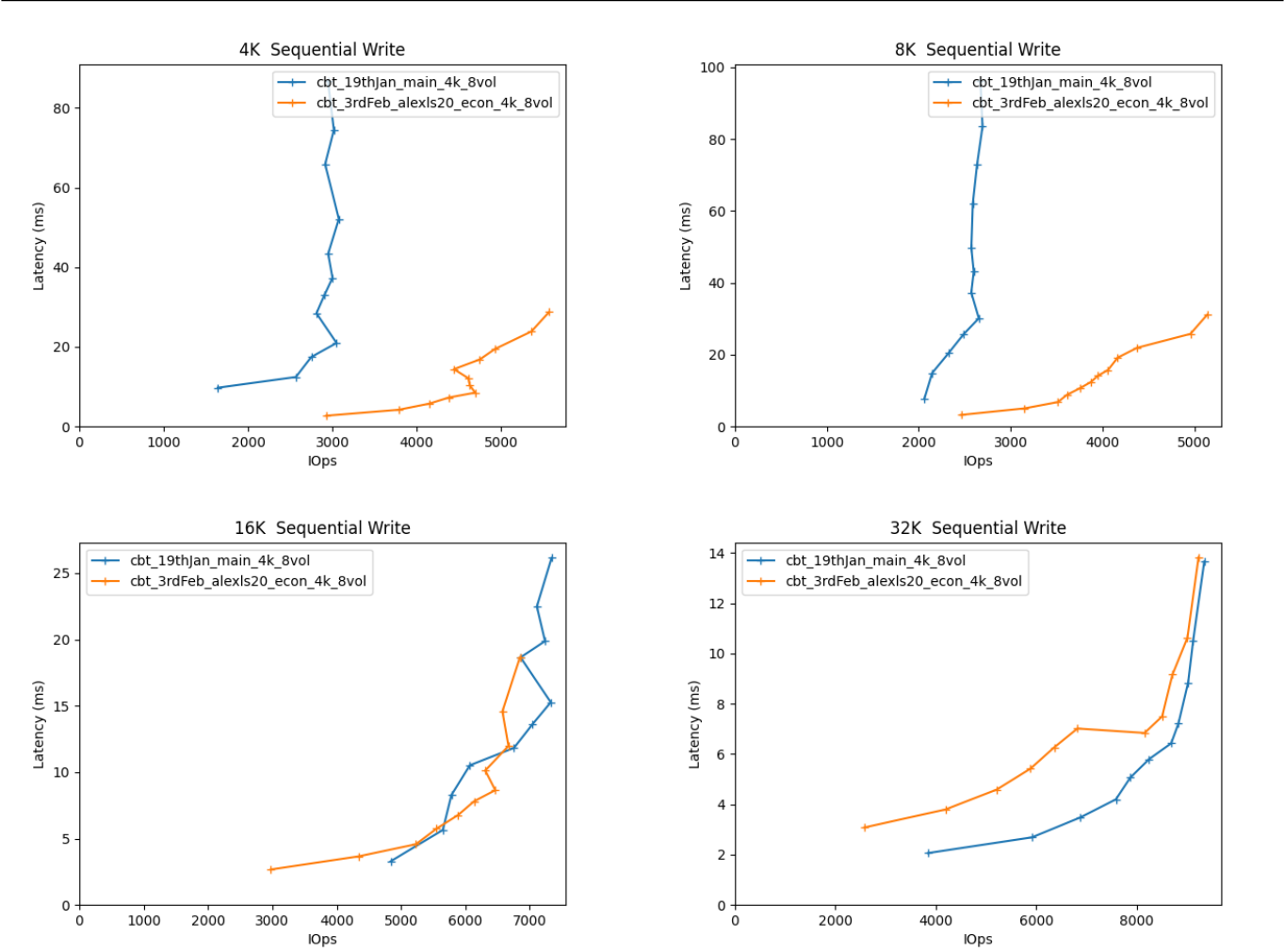
Response Curves

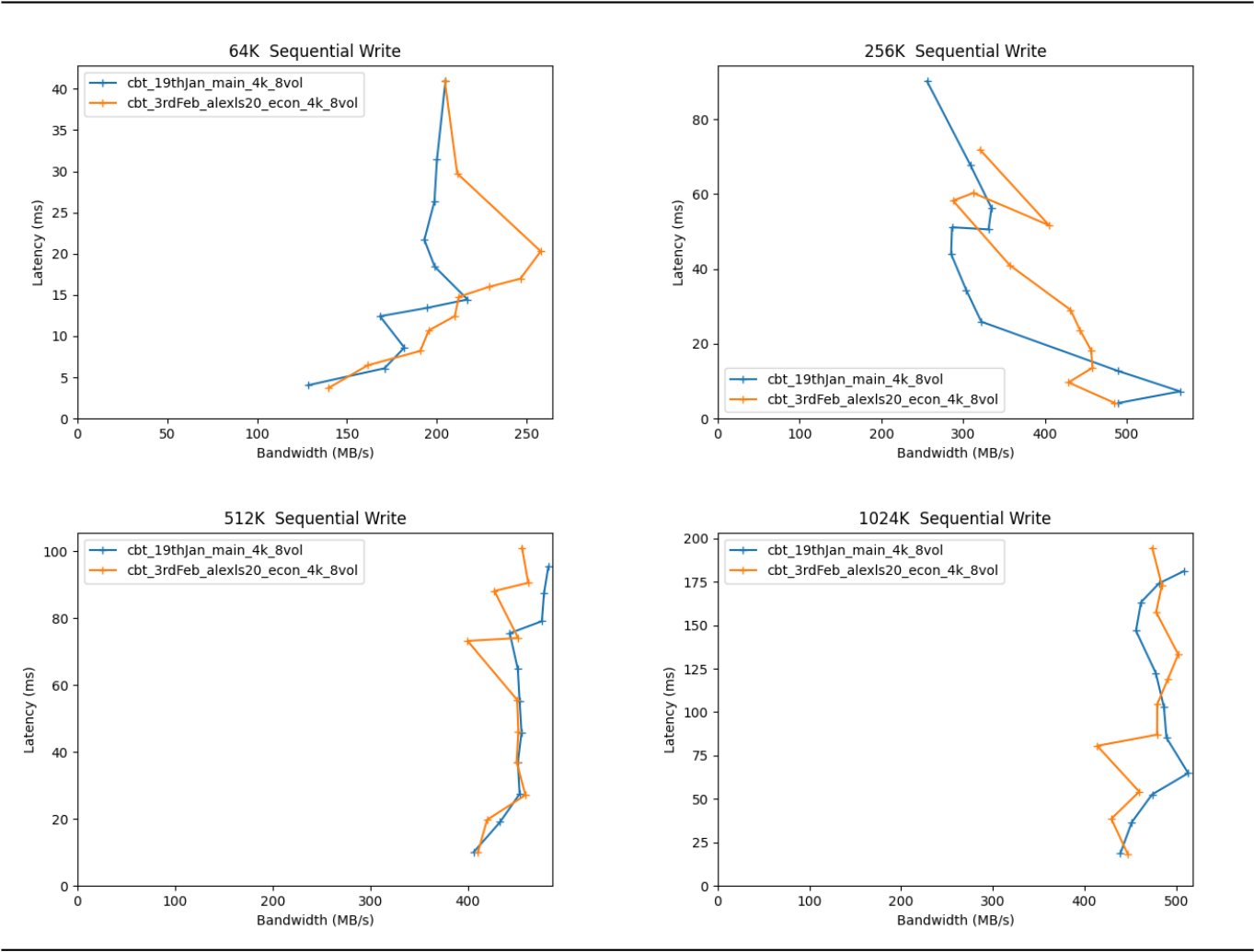
Sequential Read



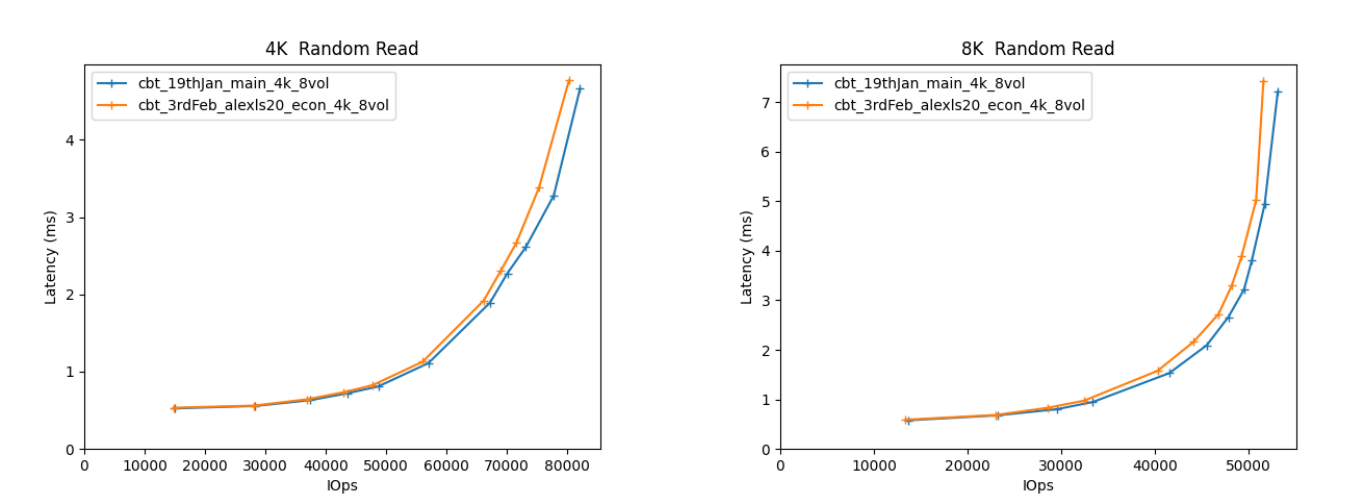


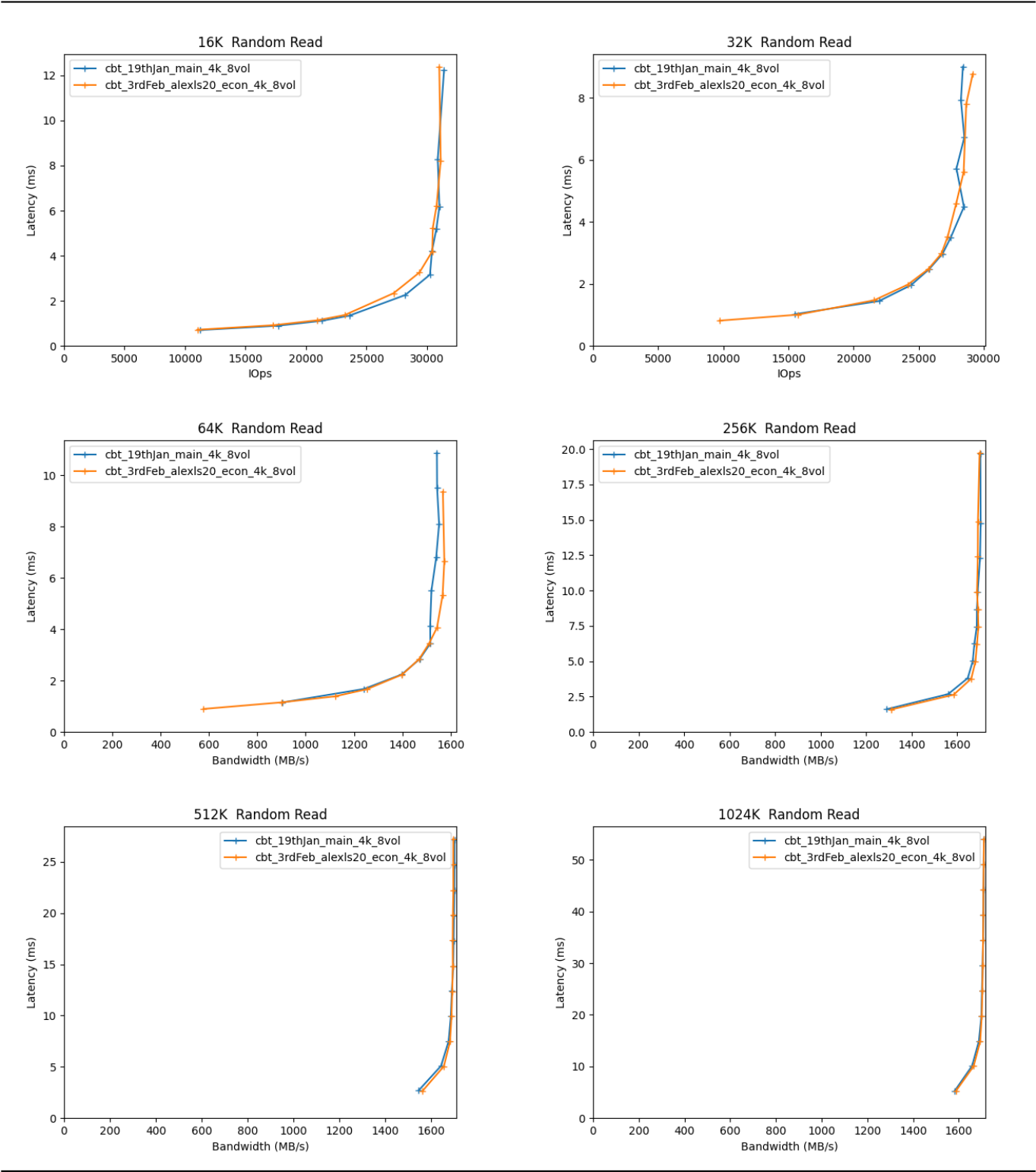
Sequential Write



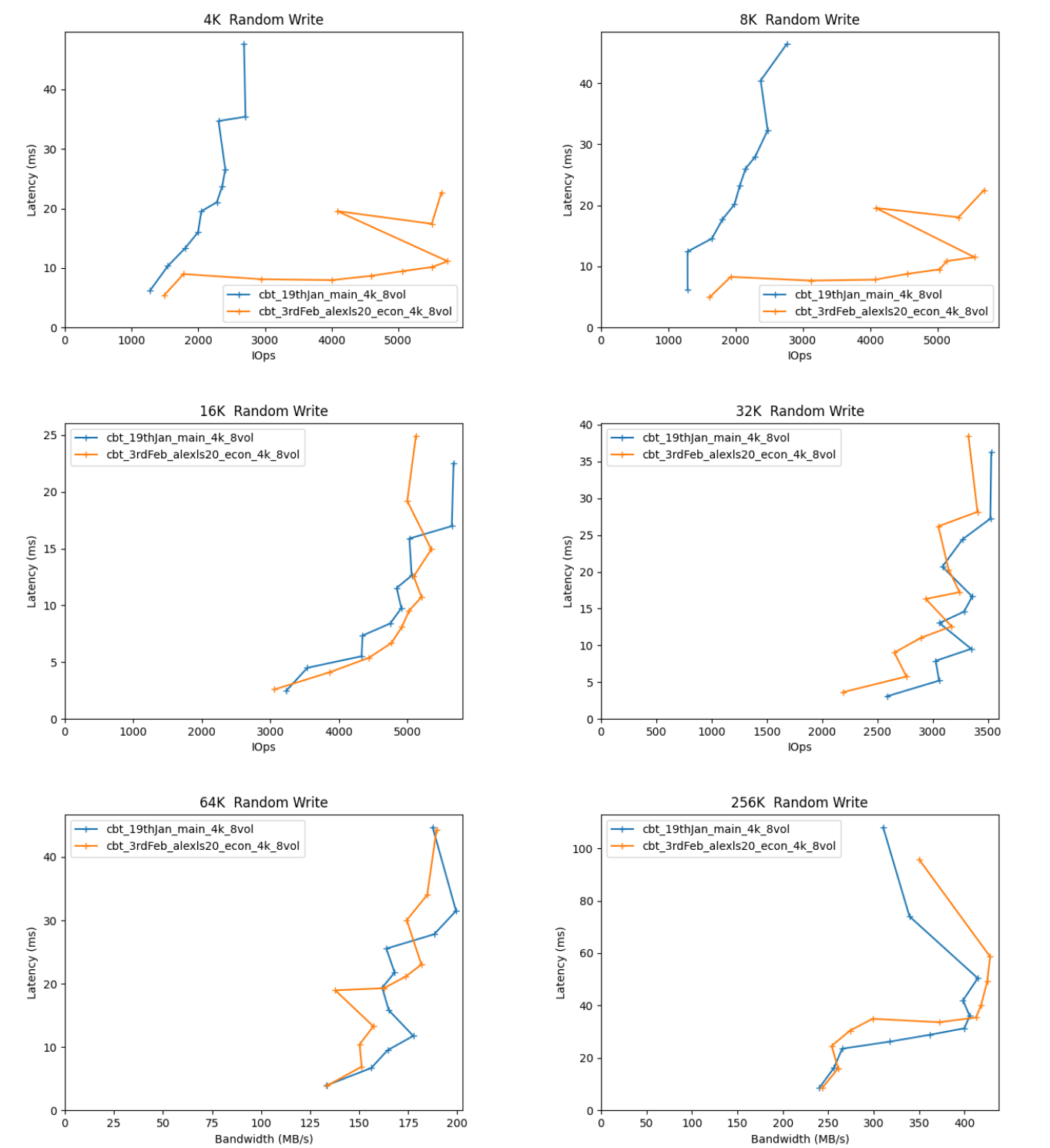


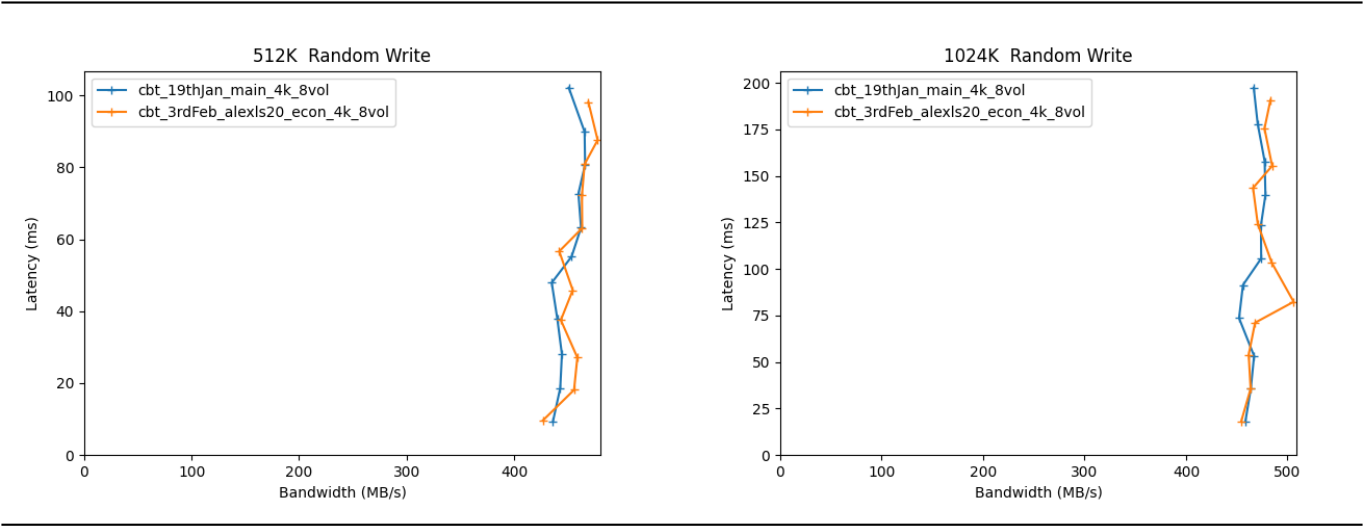
Random Read



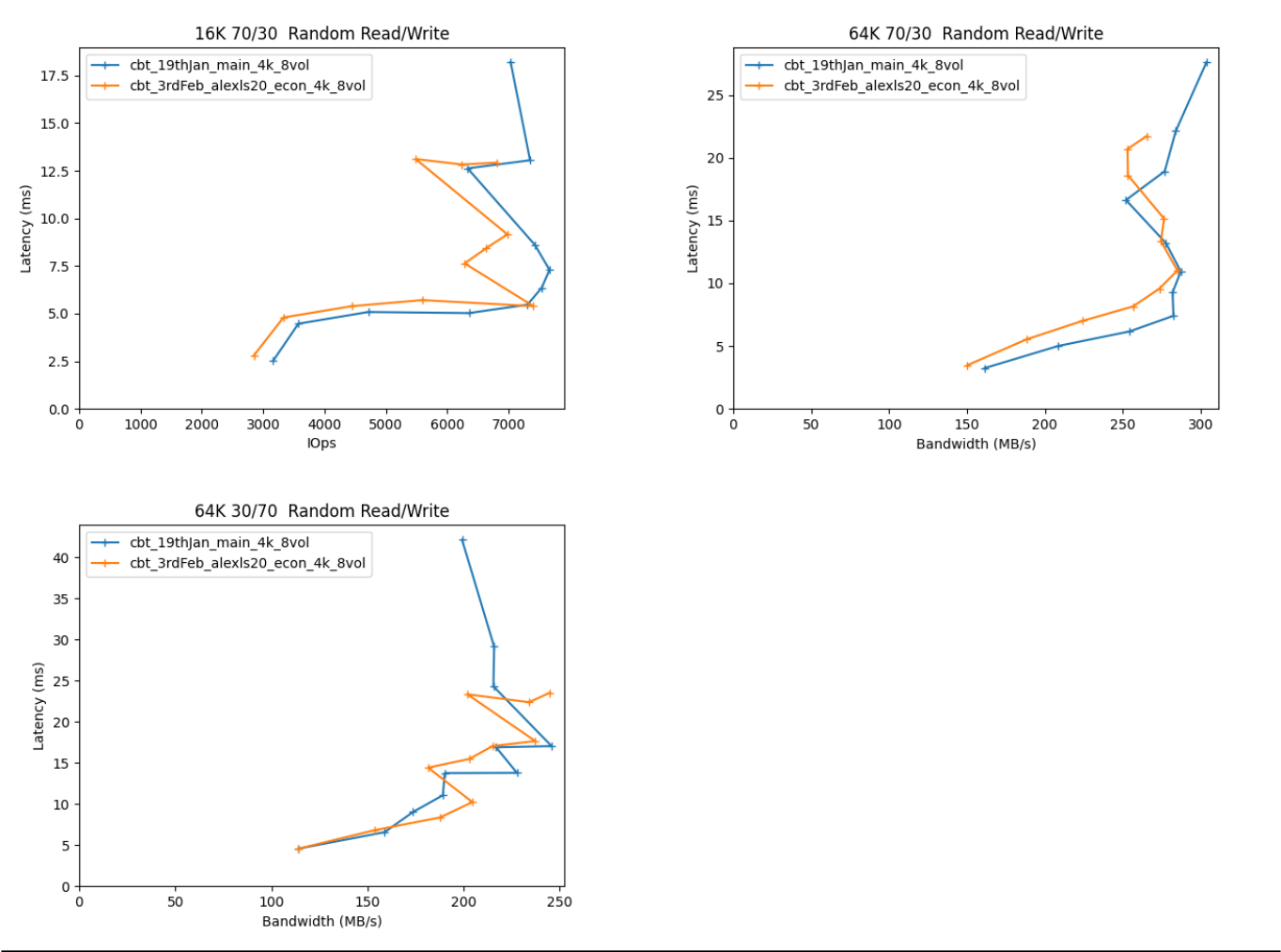


Random Write





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
  precondition_time: 600
  prefill:
    blocksize: 64k
    numjobs: 1
  procs_per_volume:
    - 1
  ramp: 30
  time: 60
  time_based: true
  use_existing_volumes: true
  vol_size: 52500
  volumes_per_client:
    - 8
  workloads:
    16k7030:
      iodepth:
        - 1
        - 2
        - 3
        - 4
        - 5
        - 6
        - 7
        - 8
        - 10
        - 12
        - 16
      jobname: randmix
      mode: randrw
      numjobs:
        - 1
        - 1
        - 1
        - 1
        - 1
        - 1
        - 1
        - 1
        - 1
        - 1
        - 1
        - 1
        - 1
        - 1
        - 1
      op_size: 16384
      rwmixread: 70
    16krandomread:
      iodepth:
        - 1
        - 2
        - 3
        - 4
        - 8

```

```

- 12
- 16
- 20
- 24
- 32
- 48
jobname: randread
mode: randread
numjobs:
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
op_size: 16384
16krandomwrite:
  iodepth:
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 10
- 12
- 16
  jobname: randwrite
  mode: randwrite
  numjobs:
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
op_size: 16384
1Mrandomread:
  iodepth:
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
  jobname: randread

```

```

mode: randread
numjobs:
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
  op_size: 1048576
1Mrandomwrite:
  iodepth:
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
  jobname: randwrite
  mode: randwrite
  numjobs:
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
  op_size: 1048576
1Mseqread:
  iodepth:
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
  jobname: seqread
  mode: read
  numjobs:
- 1
- 1
- 1
- 1
- 1

```

```

- 1
- 1
- 1
- 1
- 1
- 1
  op_size: 1048576
1Mseqwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 9
    - 10
    - 11
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
  op_size: 1048576
256krandomread:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 10
    - 12
    - 16
  jobname: randread
  mode: randread
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
  op_size: 262144

```

```

256krandomwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 10
    - 12
    - 16
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
  op_size: 262144
32krandomread:
  iodepth:
    - 2
    - 4
    - 6
    - 8
    - 10
    - 12
    - 16
    - 20
    - 24
    - 28
    - 32
  jobname: randread
  mode: randread
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
  op_size: 32768
32krandomwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5

```



```

- 6
- 7
- 8
- 10
- 12
- 16
jobname: randwrite
mode: randwrite
numjobs:
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
op_size: 32768
4krandomread:
  iodepth:
- 1
- 2
- 3
- 4
- 5
- 8
- 16
- 20
- 24
- 32
- 48
  jobname: randread
  mode: randread
  numjobs:
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
op_size: 4096
4krandomwrite:
  iodepth:
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 10
- 12
- 16
  jobname: randwrite

```

```

mode: randwrite
numjobs:
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
op_size: 4096
512krandomread:
iodepth:
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
jobname: randread
mode: randread
numjobs:
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
op_size: 524288
512krandomwrite:
iodepth:
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
jobname: randwrite
mode: randwrite
numjobs:
- 1
- 1
- 1
- 1
- 1

```

```

- 1
- 1
- 1
- 1
- 1
- 1
  op_size: 524288
512kseqread:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 9
    - 10
    - 11
  jobname: seqread
  mode: read
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
  op_size: 524288
512kseqwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 9
    - 10
    - 11
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
  op_size: 524288

```

```

64k3070:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 10
    - 12
    - 16
  jobname: randmix
  mode: randrw
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
  op_size: 65536
  rwmixread: 30

```

```

64k7030:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 10
    - 12
    - 16
  jobname: randmix
  mode: randrw
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
  op_size: 65536
  rwmixread: 70

```

```

64krandomread:
  iodepth:
    - 2
    - 4
    - 6

```

```

- 8
- 10
- 12
- 16
- 20
- 24
- 28
- 32
  jobname: randread
  mode: randread
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
  op_size: 65536
64krandomwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 10
    - 12
    - 16
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
  op_size: 65536
64kseqread:
  iodepth:
    - 2
    - 4
    - 6
    - 8
    - 10
    - 12
    - 16
    - 20
    - 24
    - 28

```

```

- 32
  jobname: read
  mode: read
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
  op_size: 65536
64kseqwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 10
    - 12
    - 16
  jobname: write
  mode: write
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
  op_size: 65536
8krandomread:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 8
    - 12
    - 16
    - 20
    - 24
    - 32
    - 48
  jobname: randread
  mode: randread
  numjobs:
    - 1
    - 1
    - 1

```

```

- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
  op_size: 8192
8krandomwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 10
    - 12
    - 16
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
  op_size: 8192
precondition:
  iodepth:
    - 2
  jobname: precond1rw
  mode: randwrite
  monitor: false
  numjobs:
    - 1
  op_size: 65536
  precondition: true
seq16kread:
  iodepth:
    - 2
    - 4
    - 6
    - 8
    - 10
    - 12
    - 14
    - 16
    - 18
    - 20
    - 24
  jobname: seqread
  mode: read
  numjobs:

```

```

- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
  op_size: 16384
seq16kwrite:
  iodepth:
    - 2
    - 4
    - 6
    - 8
    - 10
    - 12
    - 14
    - 16
    - 18
    - 20
    - 24
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
  op_size: 16384
seq256kread:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 9
    - 10
    - 11
  jobname: seqread
  mode: read
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1

```



```

- 1
- 1
- 1
- 1
  op_size: 262144
seq256kwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 9
    - 10
    - 11
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
  op_size: 262144
seq32kread:
  iodepth:
    - 2
    - 4
    - 8
    - 10
    - 12
    - 14
    - 16
    - 18
    - 20
    - 22
    - 24
  jobname: seqread
  mode: read
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
  op_size: 32768
seq32kwrite:
  iodepth:

```

```

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 10
- 12
- 16
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
  op_size: 32768
  seq4kread:
    iodepth:
      - 2
      - 4
      - 6
      - 8
      - 10
      - 12
      - 14
      - 16
      - 18
      - 20
      - 24
    jobname: seqread
    mode: read
    numjobs:
      - 1
      - 1
      - 1
      - 1
      - 1
      - 1
      - 1
      - 1
      - 1
      - 1
      - 1
    op_size: 4096
  seq4kwrite:
    iodepth:
      - 2
      - 4
      - 6
      - 8
      - 10
      - 12
      - 14

```

```

- 16
- 20
- 24
- 28
- 32
jobname: seqwrite
mode: write
numjobs:
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
op_size: 4096
seq8kread:
iodepth:
- 2
- 4
- 6
- 8
- 10
- 12
- 14
- 16
- 18
- 20
- 24
jobname: seqread
mode: read
numjobs:
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
op_size: 8192
seq8kwrite:
iodepth:
- 2
- 4
- 6
- 8
- 10
- 12
- 14
- 16
- 20
- 24
- 28
- 32

```

```

    jobname: seqwrite
    mode: write
    numjobs:
      - 1
      - 1
      - 1
      - 1
      - 1
      - 1
      - 1
      - 1
      - 1
      - 1
      - 1
    op_size: 8192
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: 6
  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: root
monitoring_profiles:
  collectl:
    args: -c 18 -sCD -i 10 -P -oz -FO --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
    precondition_time: 600

```

```

prefill:
  blocksize: 64k
  numjobs: 1
procs_per_volume:
- 1
ramp: 30
time: 60
time_based: true
use_existing_volumes: true
vol_size: 52500
volumes_per_client:
- 8
workloads:
  16k7030:
    iodepth:
      - 1
      - 2
      - 3
      - 4
      - 5
      - 6
      - 7
      - 8
      - 10
      - 12
      - 16
    jobname: randmix
    mode: randrw
    numjobs:
      - 1
      - 1
      - 1
      - 1
      - 1
      - 1
      - 1
      - 1
      - 1
      - 1
      - 1
      - 1
      - 1
      - 1
      - 1
    op_size: 16384
    rwmixread: 70
  16krandomread:
    iodepth:
      - 1
      - 2
      - 3
      - 4
      - 8
      - 12
      - 16
      - 20
      - 24
      - 32
      - 48
    jobname: randread
    mode: randread
    numjobs:
      - 1
      - 1
      - 1
      - 1
      - 1

```

```

- 1
- 1
- 1
- 1
- 1
- 1
  op_size: 16384
16krandomwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 10
    - 12
    - 16
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
  op_size: 16384
1Mrandomread:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 9
    - 10
    - 11
  jobname: randread
  mode: randread
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
  op_size: 1048576

```

```

1Mrandomwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 9
    - 10
    - 11
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
  op_size: 1048576
1Mseqread:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 9
    - 10
    - 11
  jobname: seqread
  mode: read
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
  op_size: 1048576
1Mseqwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5

```

```

- 6
- 7
- 8
- 9
- 10
- 11
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
  op_size: 1048576
256krandomread:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 10
    - 12
    - 16
  jobname: randread
  mode: randread
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
  op_size: 262144
256krandomwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 10
    - 12
    - 16
  jobname: randwrite

```



```

mode: randwrite
numjobs:
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
op_size: 262144
32krandomread:
iodepth:
- 2
- 4
- 6
- 8
- 10
- 12
- 16
- 20
- 24
- 28
- 32
jobname: randread
mode: randread
numjobs:
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
op_size: 32768
32krandomwrite:
iodepth:
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 10
- 12
- 16
jobname: randwrite
mode: randwrite
numjobs:
- 1
- 1
- 1
- 1
- 1

```

```

- 1
- 1
- 1
- 1
- 1
- 1
  op_size: 32768
4krandomread:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 16
    - 20
    - 24
    - 32
    - 48
  jobname: randread
  mode: randread
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
  op_size: 4096
4krandomwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 10
    - 12
    - 16
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
  op_size: 4096

```

```

512krandomread:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 9
    - 10
    - 11
  jobname: randread
  mode: randread
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
  op_size: 524288
512krandomwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 9
    - 10
    - 11
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
  op_size: 524288
512kseqread:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5

```

```

- 6
- 7
- 8
- 9
- 10
- 11
  jobname: seqread
  mode: read
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
  op_size: 524288
512kseqwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 9
    - 10
    - 11
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
  op_size: 524288
64k3070:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 10
    - 12
    - 16
  jobname: randmix

```

```

mode: randrw
numjobs:
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
op_size: 65536
rwmixread: 30
64k7030:
iodepth:
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 10
- 12
- 16
jobname: randmix
mode: randrw
numjobs:
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
op_size: 65536
rwmixread: 70
64krandomread:
iodepth:
- 2
- 4
- 6
- 8
- 10
- 12
- 16
- 20
- 24
- 28
- 32
jobname: randread
mode: randread
numjobs:
- 1
- 1
- 1

```

```

- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
  op_size: 65536
64krandomwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 10
    - 12
    - 16
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
  op_size: 65536
64kseqread:
  iodepth:
    - 2
    - 4
    - 6
    - 8
    - 10
    - 12
    - 16
    - 20
    - 24
    - 28
    - 32
  jobname: read
  mode: read
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1

```

```

- 1
  op_size: 65536
64kseqwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 10
    - 12
    - 16
  jobname: write
  mode: write
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
  op_size: 65536
8krandomread:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 8
    - 12
    - 16
    - 20
    - 24
    - 32
    - 48
  jobname: randread
  mode: randread
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
  op_size: 8192
8krandomwrite:
  iodepth:
    - 1
    - 2
    - 3

```

```

- 4
- 5
- 6
- 7
- 8
- 10
- 12
- 16
jobname: randwrite
mode: randwrite
numjobs:
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
op_size: 8192
precondition:
  iodepth:
  - 2
  jobname: precond1rw
  mode: randwrite
  monitor: false
  numjobs:
  - 1
  op_size: 65536
  precondition: true
seq16kread:
  iodepth:
  - 2
  - 4
  - 6
  - 8
  - 10
  - 12
  - 14
  - 16
  - 18
  - 20
  - 24
  jobname: seqread
  mode: read
  numjobs:
  - 1
  - 1
  - 1
  - 1
  - 1
  - 1
  - 1
  - 1
  - 1
  - 1
  - 1
  - 1
  - 1
  - 1
  op_size: 16384
seq16kwrite:
  iodepth:

```



```

- 2
- 4
- 6
- 8
- 10
- 12
- 14
- 16
- 18
- 20
- 24
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
  op_size: 16384
  seq256kread:
    iodepth:
      - 1
      - 2
      - 3
      - 4
      - 5
      - 6
      - 7
      - 8
      - 9
      - 10
      - 11
    jobname: seqread
    mode: read
    numjobs:
      - 1
      - 1
      - 1
      - 1
      - 1
      - 1
      - 1
      - 1
      - 1
      - 1
      - 1
    op_size: 262144
  seq256kwrite:
    iodepth:
      - 1
      - 2
      - 3
      - 4
      - 5
      - 6
      - 7

```

```

- 8
- 9
- 10
- 11
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
  op_size: 262144
seq32kread:
  iodepth:
    - 2
    - 4
    - 8
    - 10
    - 12
    - 14
    - 16
    - 18
    - 20
    - 22
    - 24
  jobname: seqread
  mode: read
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
  op_size: 32768
seq32kwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 10
    - 12
    - 16
  jobname: seqwrite
  mode: write
  numjobs:

```

```

- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
  op_size: 32768
seq4kread:
  iodepth:
    - 2
    - 4
    - 6
    - 8
    - 10
    - 12
    - 14
    - 16
    - 18
    - 20
    - 24
  jobname: seqread
  mode: read
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
  op_size: 4096
seq4kwrite:
  iodepth:
    - 2
    - 4
    - 6
    - 8
    - 10
    - 12
    - 14
    - 16
    - 20
    - 24
    - 28
    - 32
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1

```

```

- 1
- 1
- 1
- 1
- 1
- 1
  op_size: 4096
seq8kread:
  iodepth:
    - 2
    - 4
    - 6
    - 8
    - 10
    - 12
    - 14
    - 16
    - 18
    - 20
    - 24
  jobname: seqread
  mode: read
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
  op_size: 8192
seq8kwrite:
  iodepth:
    - 2
    - 4
    - 6
    - 8
    - 10
    - 12
    - 14
    - 16
    - 20
    - 24
    - 28
    - 32
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1

```

```

    - 1
    op_size: 8192
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: 6
      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: root
  monitoring_profiles:
    collectl:
      args: -c 18 -sCD -i 10 -P -oz -F0 --rawtoo --sep ";" -f {collectl_dir}

```

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
  precondition_time: 600
  prefill:
    blocksize: 64k
    numjobs: 1
  procs_per_volume:
    - 1
  ramp: 30
  time: 60
  time_based: true
  use_existing_volumes: true
  vol_size: 52500
  volumes_per_client:
    - 8
  workloads:
    16k7030:
      iodepth:
        - 1
        - 2
        - 3
        - 4
        - 5
        - 6
        - 7
        - 8
        - 9
        - 10
        - 11
      jobname: randmix
      mode: randrw
      numjobs:
        - 1
      op_size: 16384
      rwmixread: 70
    16krandomread:
      iodepth:
        - 1
        - 2
        - 3
        - 4
        - 8
        - 12
        - 16
        - 20
        - 24
        - 32
        - 48
      jobname: randread
      mode: randread
      numjobs:
        - 1

```

```

    op_size: 16384
16krandomwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 10
    - 12
    - 16
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
    op_size: 16384
1Mrandomread:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 9
    - 10
    - 11
  jobname: randread
  mode: randread
  numjobs:
    - 1
    op_size: 1048576
1Mrandomwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 9
    - 10
    - 11
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
    op_size: 1048576
1Mseqread:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6

```

```

- 7
- 8
- 9
- 10
- 11
  jobname: seqread
  mode: read
  numjobs:
    - 1
  op_size: 1048576
1Mseqwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 9
    - 10
    - 11
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
  op_size: 1048576
256krandomread:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 10
    - 12
    - 16
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 262144
256krandomwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 10
    - 12
    - 16
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1

```



```

    op_size: 262144
32krandomread:
  iodepth:
    - 1
    - 2
    - 4
    - 6
    - 8
    - 10
    - 12
    - 16
    - 20
    - 28
    - 32
  jobname: randread
  mode: randread
  numjobs:
    - 1
    op_size: 32768
32krandomwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 10
    - 12
    - 16
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
    op_size: 32768
4krandomread:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 16
    - 20
    - 24
    - 32
    - 48
  jobname: randread
  mode: randread
  numjobs:
    - 1
    op_size: 4096
4krandomwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6

```

```

- 7
- 8
- 10
- 12
- 16
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
  op_size: 4096
512krandomread:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 9
    - 10
    - 11
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 524288
512krandomwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 9
    - 10
    - 11
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
  op_size: 524288
512kseqread:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 9
    - 10
    - 11
  jobname: seqread
  mode: read
  numjobs:
    - 1

```

```

    op_size: 524288
512kseqwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 9
    - 10
    - 11
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
    op_size: 524288
64k3070:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 9
    - 10
    - 11
  jobname: randmix
  mode: randrw
  numjobs:
    - 1
    op_size: 65536
    rwmixread: 30
64k7030:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 9
    - 10
    - 11
  jobname: randmix
  mode: randrw
  numjobs:
    - 1
    op_size: 65536
    rwmixread: 70
64krandomread:
  iodepth:
    - 1
    - 2
    - 3
    - 4

```

```

- 6
- 8
- 10
- 12
- 16
- 20
- 28
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 65536
64krandomwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 10
    - 12
    - 16
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
  op_size: 65536
64kseqread:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 8
    - 10
    - 12
    - 16
    - 20
  jobname: read
  mode: read
  numjobs:
    - 1
  op_size: 65536
64kseqwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 10
    - 12
    - 16
  jobname: write
  mode: write

```

```

  numjobs:
  - 1
  op_size: 65536
8krandomread:
  iodepth:
  - 1
  - 2
  - 3
  - 4
  - 8
  - 12
  - 16
  - 20
  - 24
  - 32
  - 48
  jobname: randread
  mode: randread
  numjobs:
  - 1
  op_size: 8192
8krandomwrite:
  iodepth:
  - 1
  - 2
  - 3
  - 4
  - 5
  - 6
  - 7
  - 8
  - 10
  - 12
  - 16
  jobname: randwrite
  mode: randwrite
  numjobs:
  - 1
  op_size: 8192
precondition:
  iodepth:
  - 2
  jobname: precond1rw
  mode: randwrite
  monitor: false
  numjobs:
  - 1
  op_size: 65536
  precondition: true
seq16kread:
  iodepth:
  - 1
  - 2
  - 3
  - 4
  - 5
  - 6
  - 7
  - 8
  - 10
  - 12
  - 16
  jobname: seqread

```

```

    mode: read
    numjobs:
      - 1
    op_size: 16384
  seq16kwrite:
    iodepth:
      - 1
      - 2
      - 3
      - 4
      - 5
      - 6
      - 7
      - 8
      - 10
      - 12
      - 16
    jobname: seqwrite
    mode: write
    numjobs:
      - 1
    op_size: 16384
  seq256kread:
    iodepth:
      - 1
      - 2
      - 3
      - 4
      - 5
      - 6
      - 7
      - 8
      - 9
      - 10
      - 11
    jobname: seqread
    mode: read
    numjobs:
      - 1
    op_size: 262144
  seq256kwrite:
    iodepth:
      - 1
      - 2
      - 3
      - 4
      - 5
      - 6
      - 7
      - 8
      - 9
      - 10
      - 11
    jobname: seqwrite
    mode: write
    numjobs:
      - 1
    op_size: 262144
  seq32kread:
    iodepth:
      - 1
      - 2
      - 3

```

```

- 4
- 5
- 6
- 7
- 8
- 10
- 12
- 16
  jobname: seqread
  mode: read
  numjobs:
    - 1
  op_size: 32768
seq32kwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 10
    - 12
    - 16
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
  op_size: 32768
seq4kread:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 6
    - 8
    - 10
    - 12
    - 14
    - 16
    - 20
  jobname: seqread
  mode: read
  numjobs:
    - 1
  op_size: 4096
seq4kwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 10
    - 12
    - 16
    - 20

```

```

    jobname: seqwrite
    mode: write
    numjobs:
      - 1
    op_size: 4096
  seq8kread:
    iodepth:
      - 1
      - 2
      - 3
      - 4
      - 5
      - 6
      - 8
      - 10
      - 12
      - 14
      - 16
    jobname: seqread
    mode: read
    numjobs:
      - 1
    op_size: 8192
  seq8kwrite:
    iodepth:
      - 1
      - 2
      - 3
      - 4
      - 5
      - 6
      - 7
      - 8
      - 10
      - 12
      - 16
      - 20
    jobname: seqwrite
    mode: write
    numjobs:
      - 1
    op_size: 8192
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: 6
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: root
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
    precondition_time: 600
    prefill:
      blocksize: 64k
      numjobs: 1
    procs_per_volume:
      - 1
    ramp: 30
    time: 60
    time_based: true
    use_existing_volumes: true
    vol_size: 52500
    volumes_per_client:
      - 8
    workloads:
      16k7030:
        iodepth:
          - 1
          - 2
          - 3
          - 4
          - 5
          - 6
          - 7
          - 8
          - 9
          - 10
          - 11
        jobname: randmix
        mode: randrw
        numjobs:
          - 1
        op_size: 16384
        rwmixread: 70
      16k randomread:
        iodepth:
          - 1
          - 2
          - 3

```

```

- 4
- 8
- 12
- 16
- 20
- 24
- 32
- 48
jobname: randread
mode: randread
numjobs:
- 1
op_size: 16384
16krandomwrite:
iodepth:
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 10
- 12
- 16
jobname: randwrite
mode: randwrite
numjobs:
- 1
op_size: 16384
1Mrandomread:
iodepth:
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
jobname: randread
mode: randread
numjobs:
- 1
op_size: 1048576
1Mrandomwrite:
iodepth:
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
jobname: randwrite

```

```

    mode: randwrite
    numjobs:
      - 1
    op_size: 1048576
  1Mseqread:
    iodepth:
      - 1
      - 2
      - 3
      - 4
      - 5
      - 6
      - 7
      - 8
      - 9
      - 10
      - 11
    jobname: seqread
    mode: read
    numjobs:
      - 1
    op_size: 1048576
  1Mseqwrite:
    iodepth:
      - 1
      - 2
      - 3
      - 4
      - 5
      - 6
      - 7
      - 8
      - 9
      - 10
      - 11
    jobname: seqwrite
    mode: write
    numjobs:
      - 1
    op_size: 1048576
  256krandomread:
    iodepth:
      - 1
      - 2
      - 3
      - 4
      - 5
      - 6
      - 7
      - 8
      - 10
      - 12
      - 16
    jobname: randread
    mode: randread
    numjobs:
      - 1
    op_size: 262144
  256krandomwrite:
    iodepth:
      - 1
      - 2
      - 3

```

```

- 4
- 5
- 6
- 7
- 8
- 10
- 12
- 16
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
  op_size: 262144
32krandomread:
  iodepth:
    - 1
    - 2
    - 4
    - 6
    - 8
    - 10
    - 12
    - 16
    - 20
    - 28
    - 32
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 32768
32krandomwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 10
    - 12
    - 16
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
  op_size: 32768
4krandomread:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 16
    - 20
    - 24
    - 32
    - 48
  jobname: randread

```

```

    mode: randread
    numjobs:
      - 1
    op_size: 4096
4krandomwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 10
    - 12
    - 16
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
  op_size: 4096
512krandomread:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 9
    - 10
    - 11
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 524288
512krandomwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 9
    - 10
    - 11
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
  op_size: 524288
512kseqread:
  iodepth:
    - 1
    - 2
    - 3

```

```

- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
  jobname: seqread
  mode: read
  numjobs:
    - 1
  op_size: 524288
512kseqwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 9
    - 10
    - 11
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
  op_size: 524288
64k3070:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 9
    - 10
    - 11
  jobname: randmix
  mode: randrw
  numjobs:
    - 1
  op_size: 65536
  rwmixread: 30
64k7030:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 9
    - 10
    - 11

```

```

  jobname: randmix
  mode: randrw
  numjobs:
  - 1
  op_size: 65536
  rwmixread: 70
64krandomread:
  iodepth:
  - 1
  - 2
  - 3
  - 4
  - 6
  - 8
  - 10
  - 12
  - 16
  - 20
  - 28
  jobname: randread
  mode: randread
  numjobs:
  - 1
  op_size: 65536
64krandomwrite:
  iodepth:
  - 1
  - 2
  - 3
  - 4
  - 5
  - 6
  - 7
  - 8
  - 10
  - 12
  - 16
  jobname: randwrite
  mode: randwrite
  numjobs:
  - 1
  op_size: 65536
64kseqread:
  iodepth:
  - 1
  - 2
  - 3
  - 4
  - 5
  - 6
  - 8
  - 10
  - 12
  - 16
  - 20
  jobname: read
  mode: read
  numjobs:
  - 1
  op_size: 65536
64kseqwrite:
  iodepth:
  - 1

```

```

- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 10
- 12
- 16
  jobname: write
  mode: write
  numjobs:
    - 1
  op_size: 65536
8krandomread:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 8
    - 12
    - 16
    - 20
    - 24
    - 32
    - 48
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 8192
8krandomwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 10
    - 12
    - 16
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
  op_size: 8192
precondition:
  iodepth:
    - 2
  jobname: precond1rw
  mode: randwrite
  monitor: false
  numjobs:
    - 1
  op_size: 65536
  precondition: true
seq16kread:
  iodepth:

```



```

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 10
- 12
- 16
  jobname: seqread
  mode: read
  numjobs:
    - 1
  op_size: 16384
seq16kwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 10
    - 12
    - 16
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
  op_size: 16384
seq256kread:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 9
    - 10
    - 11
  jobname: seqread
  mode: read
  numjobs:
    - 1
  op_size: 262144
seq256kwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 9

```

```

- 10
- 11
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
  op_size: 262144
seq32kread:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 10
    - 12
    - 16
  jobname: seqread
  mode: read
  numjobs:
    - 1
  op_size: 32768
seq32kwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 10
    - 12
    - 16
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
  op_size: 32768
seq4kread:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 6
    - 8
    - 10
    - 12
    - 14
    - 16
    - 20
  jobname: seqread
  mode: read
  numjobs:
    - 1
  op_size: 4096
seq4kwrite:
  iodepth:

```

```

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 10
- 12
- 16
- 20
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
  op_size: 4096
seq8kread:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 8
    - 10
    - 12
    - 14
    - 16
  jobname: seqread
  mode: read
  numjobs:
    - 1
  op_size: 8192
seq8kwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 6
    - 7
    - 8
    - 10
    - 12
    - 16
    - 20
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
  op_size: 8192
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: 6
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: root
monitoring_profiles:
  collectl:
    args: -c 18 -sCD -i 10 -P -oz -FO --rawtoo --sep ";" -f {collectl_dir}

```