

Comparitive Performance Report for cbt-17thDec-main-4k vs cbt-30thJan-alexls19-econ-4k-1vol vs cbt-1stFeb-alexls20-econ-4k-1vol

Table of contents

- Comparison summary for cbt-17thDec-main-4k vs cbt-30thJan-alexls19-econ-4k-1vol vs cbt-1stFeb-alexls20-econ-4k-1vol
- Response Curves
 - Sequential Read
 - Sequential Write
 - Random Read
 - Random Write
 - Random Read/Write
- Configuration yaml files
 - results
 - results
 - results

Comparison summary for cbt-17thDec-main-4k vs cbt-30thJan-alexsls19-econ-4k-1vol vs cbt-1stFeb-alexsls20-econ-4k-1vol

Sequential Read	cbt_17thDec_main_4k	cbt_30thJan_alexsls19_econ_4k-1vol	%change	cbt_1stFeb_alexsls20_econ_4k-1vol	%change
4K	25339@7.6ms	23842@8.0	-6%	22957@8.4	-9%
8K	17196@11.2ms	16387@11.7	-5%	16132@11.9	-6%
16K	10428@18.4ms	10335@18.6	-1%	10857@17.7	4%
32K	11409@16.8ms	11432@16.8	0%	11279@17.0	-1%
64K	977@17.2ms	970@17.3	-1%	966@17.4	-1%
256K	1495@11.2ms	1479@11.3	-1%	1482@11.3	-1%
512K	1501@11.2ms	1500@11.2	-0%	1499@11.2	-0%
1024K	1533@13.7ms	1529@13.7	-0%	1527@13.7	-0%

Sequential Write	cbt_17thDec_main_4k	cbt_30thJan_alexsls19_econ_4k-1vol	%change	cbt_1stFeb_alexsls20_econ_4k-1vol	%change
4K	2024@126.4ms	3847@66.5	90%	3841@66.6	90%
8K	2019@126.6ms	3722@68.7	84%	3658@70.0	81%
16K	5117@37.5ms	4862@39.5	-5%	4949@38.8	-3%
32K	3621@35.3ms	5707@22.4	58%	5695@22.5	57%
64K	196@42.8ms	184@45.5	-6%	191@43.9	-3%
256K	400@31.3ms	487@4.3	22%	468@2.8	17%
512K	439@28.5ms	410@7.6	-7%	442@37.8	1%
1024K	472@26.3ms	501@20.6	6%	514@24.2	9%

Random Read	cbt_17thDec_main_4k	cbt_30thJan_alexsls19_econ_4k-1vol	%change	cbt_1stFeb_alexsls20_econ_4k-1vol	%change
4K	95501@4.0ms	93436@4.1	-2%	92703@4.1	-3%
8K	60546@6.3ms	57270@6.7	-5%	58764@6.5	-3%
16K	34618@11.1ms	32522@11.8	-6%	32824@11.7	-5%
32K	31326@4.1ms	29930@4.3	-4%	29910@4.3	-5%
64K	1642@10.2ms	1638@10.2	-0%	1619@10.4	-1%
256K	1680@20.0ms	1705@19.7	1%	1712@19.6	2%
512K	1698@19.8ms	1702@19.7	0%	1704@19.7	0%
1024K	1709@19.6ms	1711@19.6	0%	1711@19.6	0%

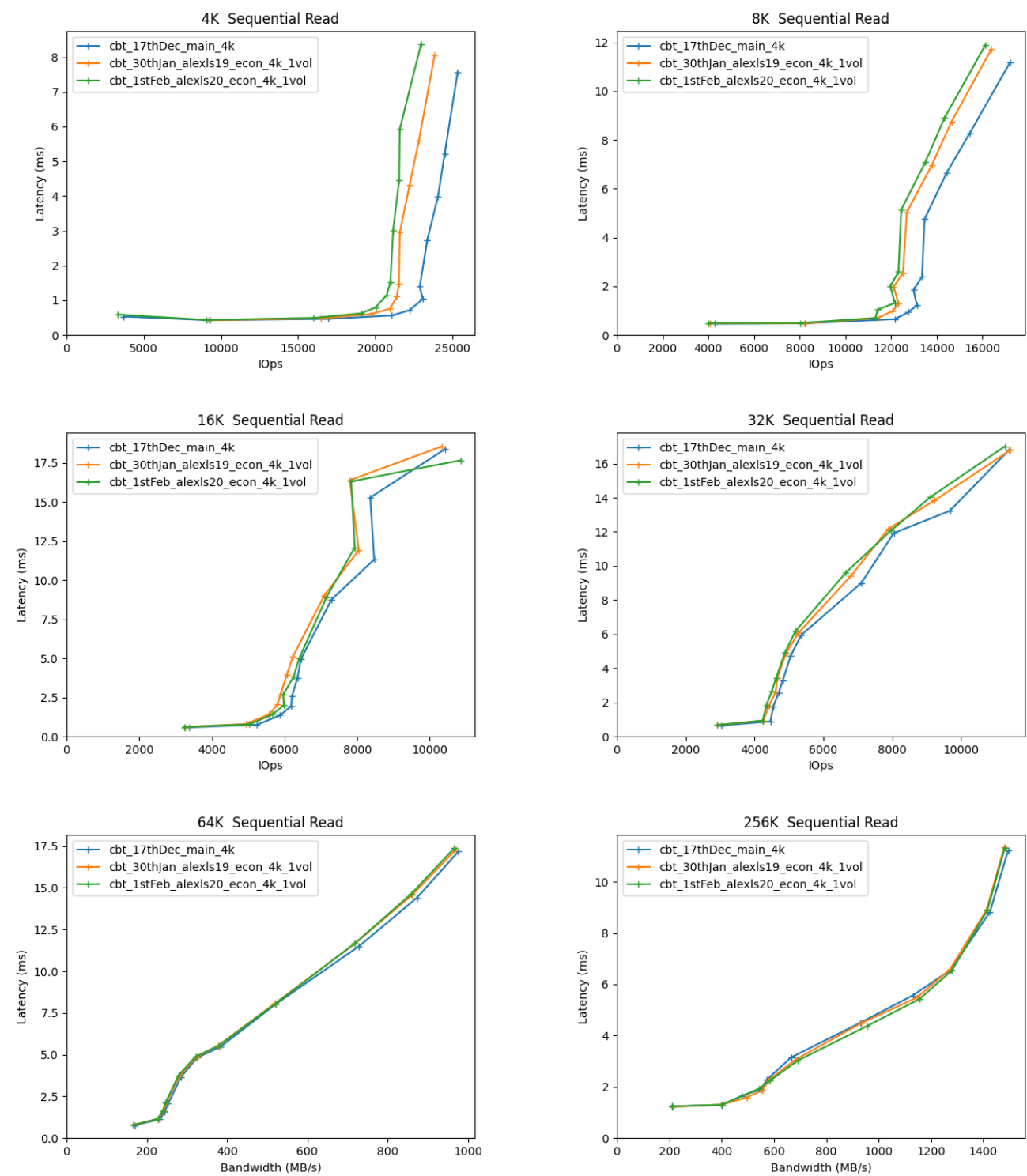
Random Write	cbt_17thDec_main_4k	cbt_30thJan_alexsls19_econ_4k-1vol	%change	cbt_1stFeb_alexsls20_econ_4k-1vol	%change
4K	2897@44.2ms	4896@26.1	69%	5128@24.9	77%
8K	2791@45.9ms	4709@27.2	69%	4675@27.4	68%
16K	5726@22.3ms	4640@27.6	-19%	4673@27.4	-18%
32K	3245@39.4ms	3520@36.3	8%	3525@36.3	9%
64K	193@21.7ms	182@23.0	-6%	178@47.1	-8%
256K	335@100.2ms	343@98.0	2%	369@91.0	10%

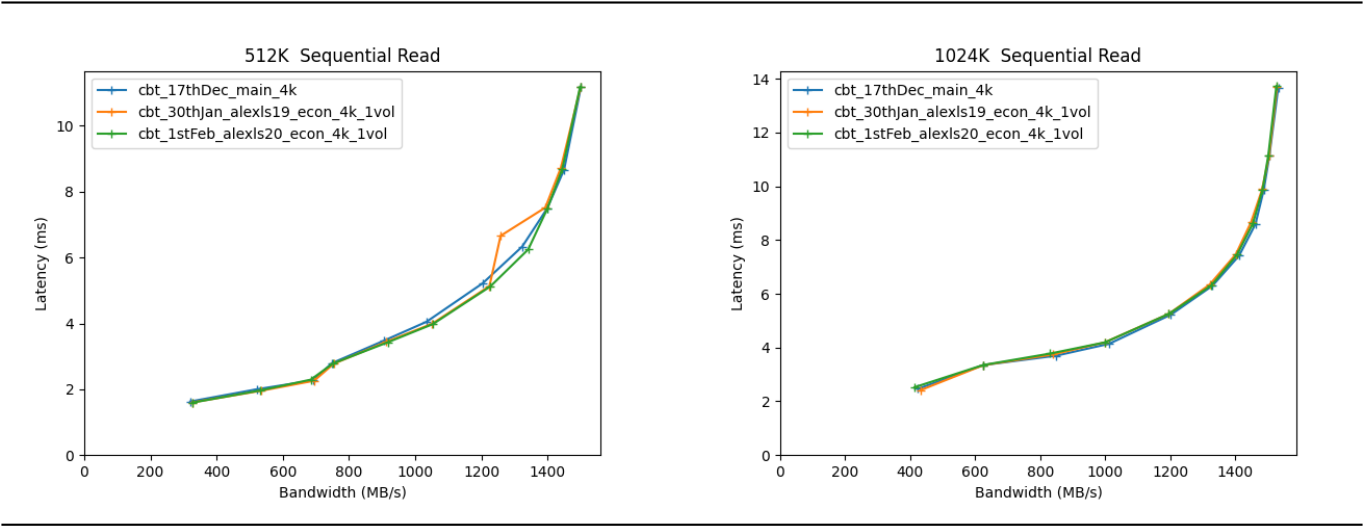
Random Write	cbt_17thDec_main_4k	cbt_30thJan_alexls19_econ_4k	%change	cbt_1stFeb_alexls20_econ_4k	%change
512K	464@72.2ms	470@71.2	1%	478@70.0	3%
1024K	472@35.2ms	501@24.8	6%	504@33.0	7%

Random Read/Write	cbt_17thDec_main_4k	cbt_30thJan_alexls19_econ_4k	%change	cbt_1stFeb_alexls20_econ_4k	%change
16K_70/30	6191@20.7ms	6475@19.8	5%	6782@18.9	10%
64K_30/70	166@12.6ms	202@7.8	22%	195@8.0	17%
64K_70/30	288@29.2ms	272@30.9	-6%	290@29.0	1%

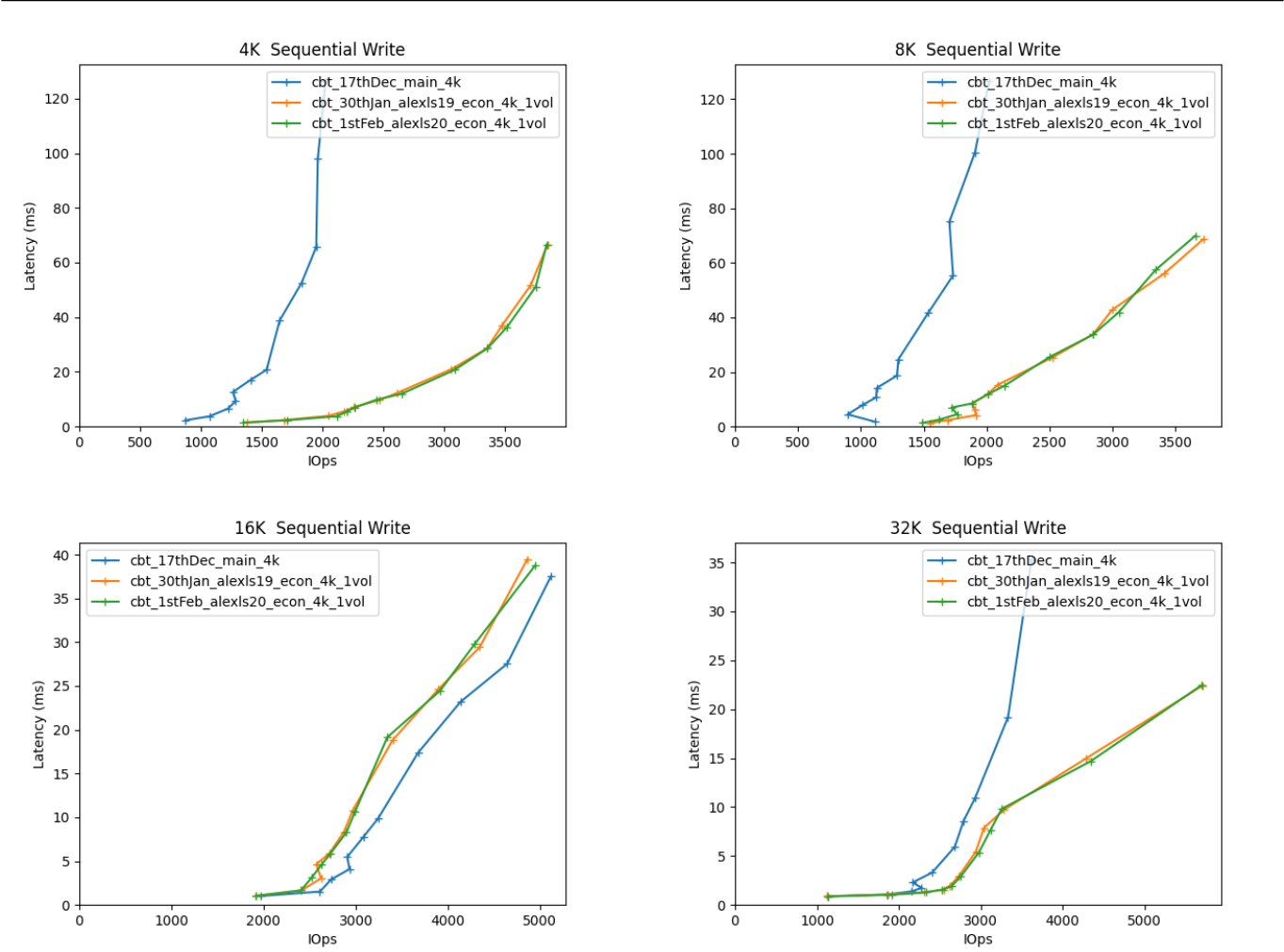
Response Curves

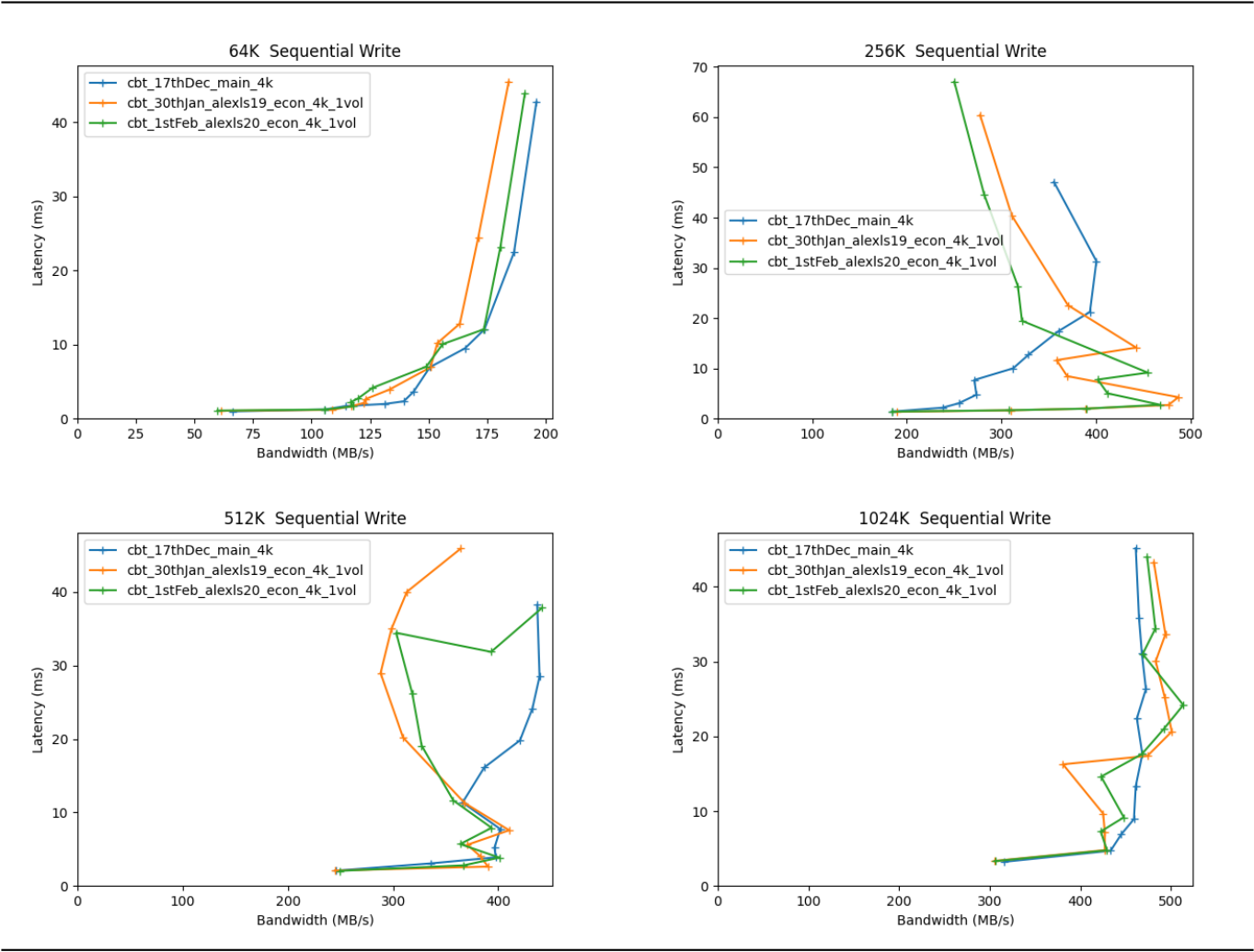
Sequential Read



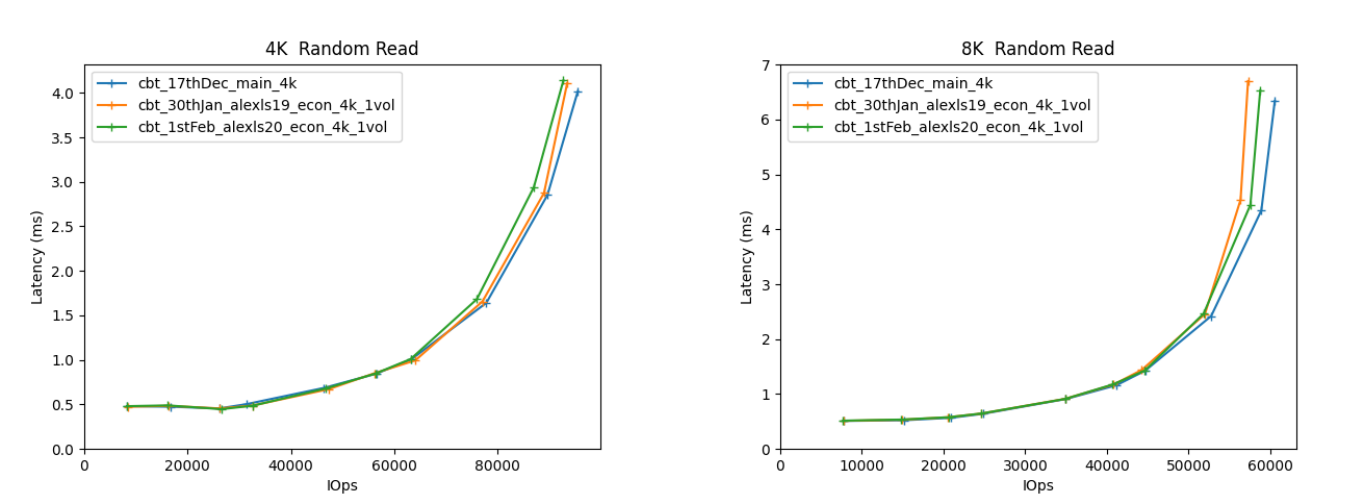


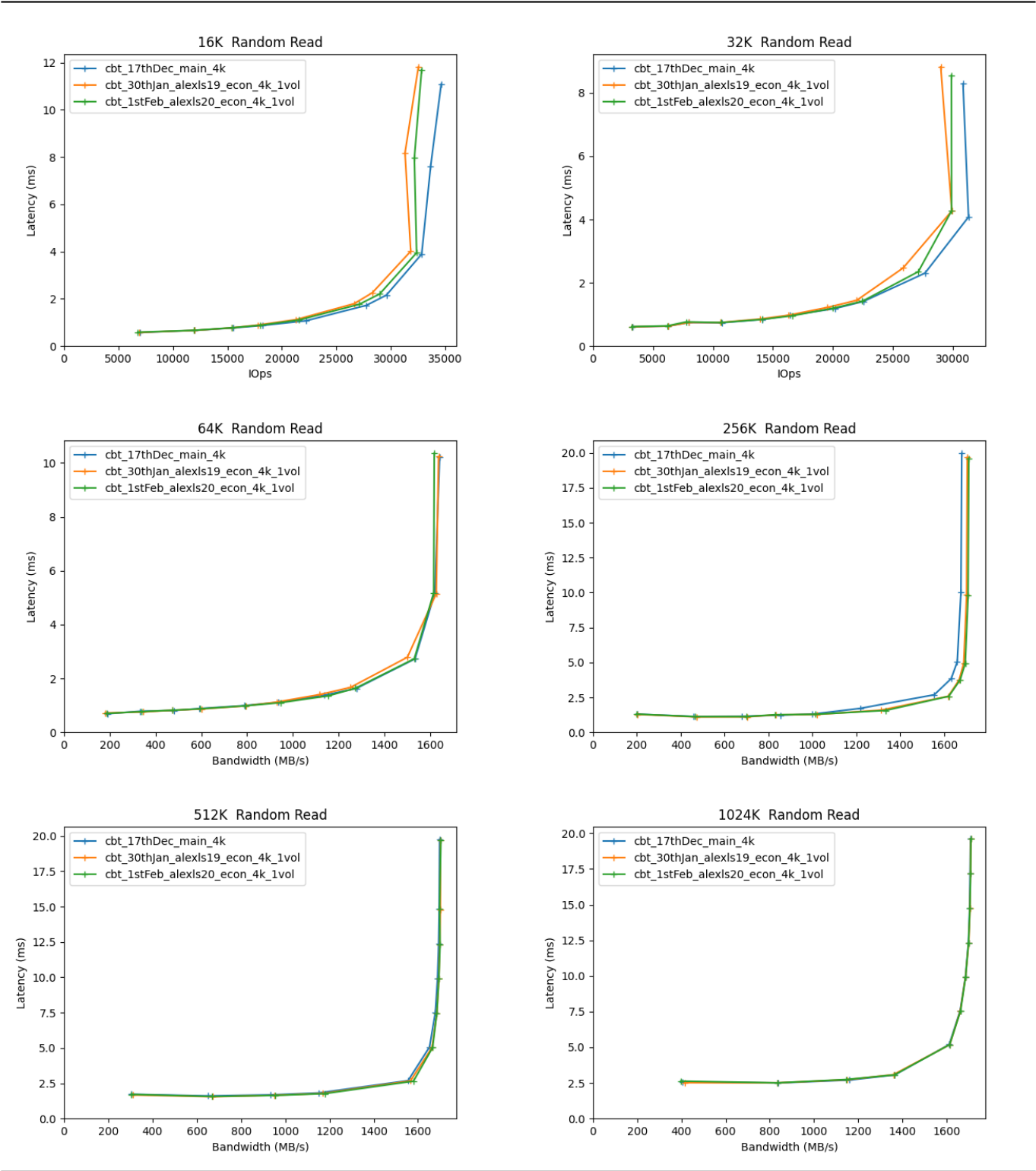
Sequential Write



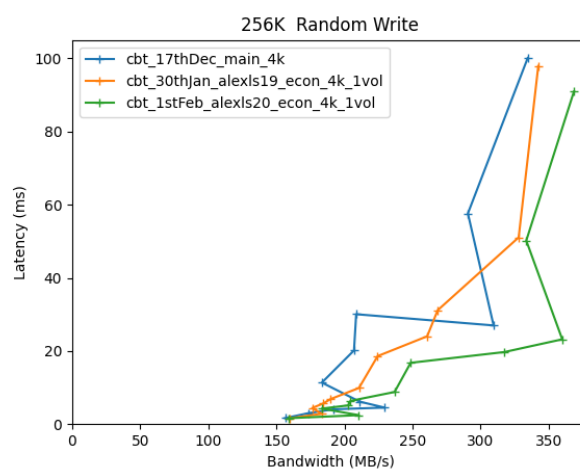
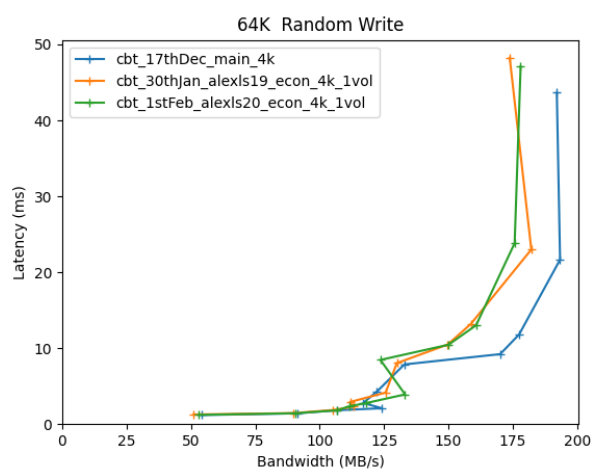
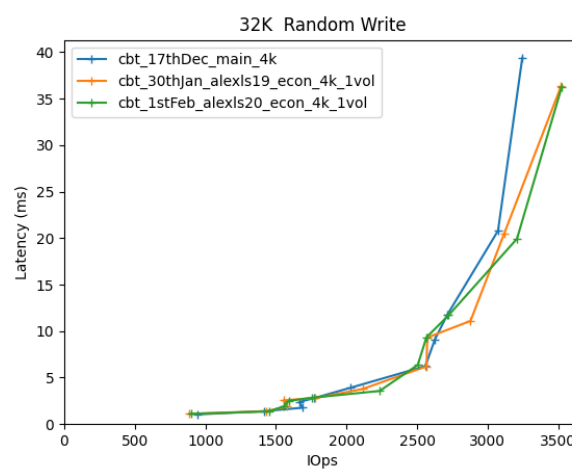
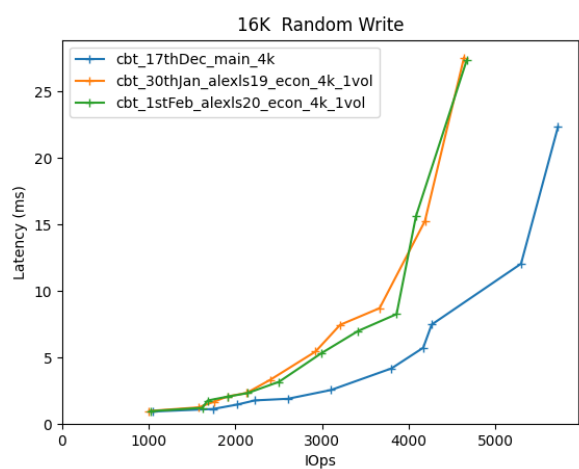
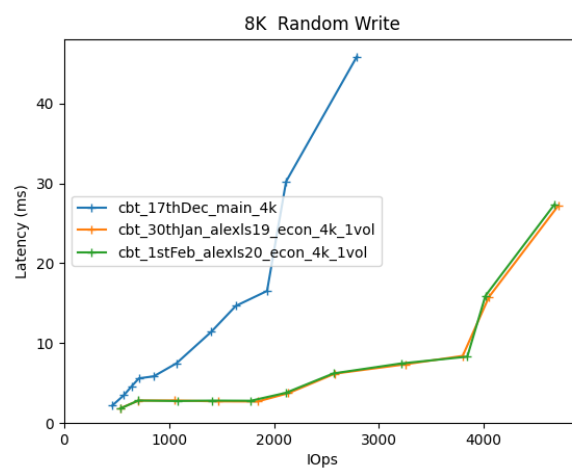
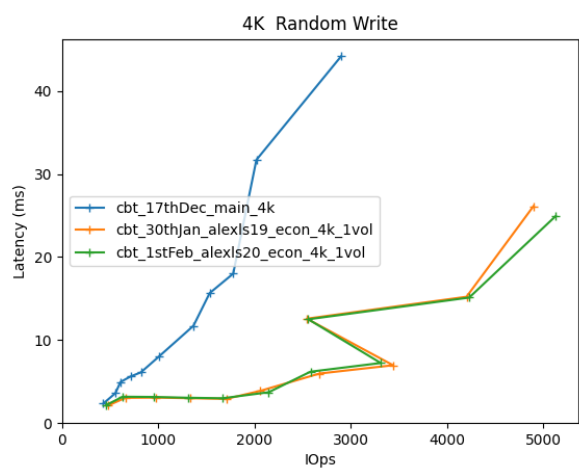


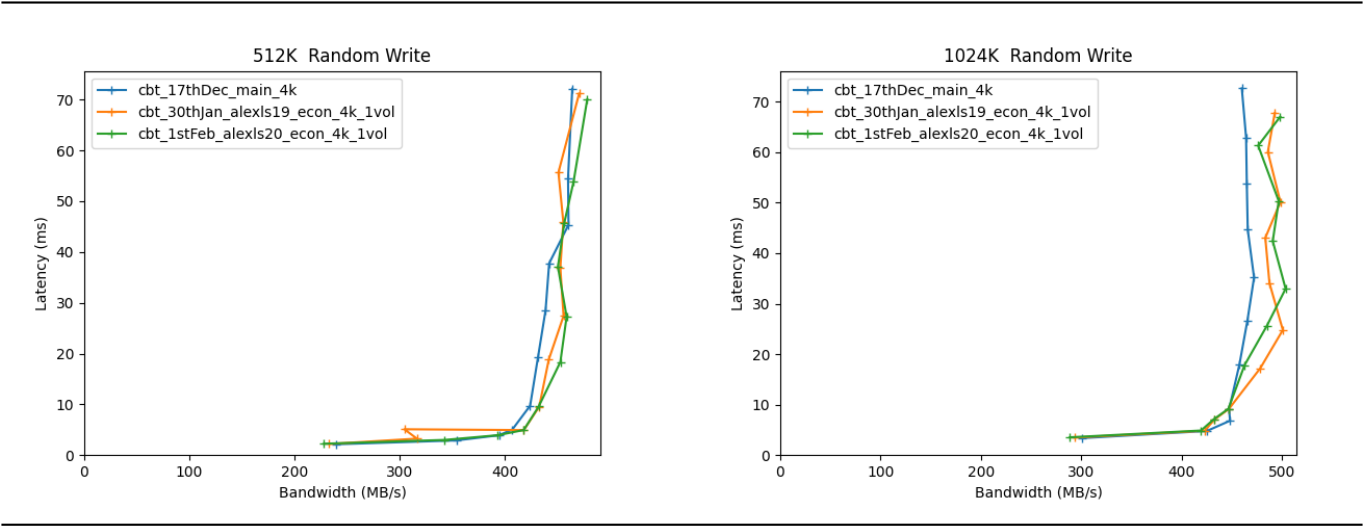
Random Read



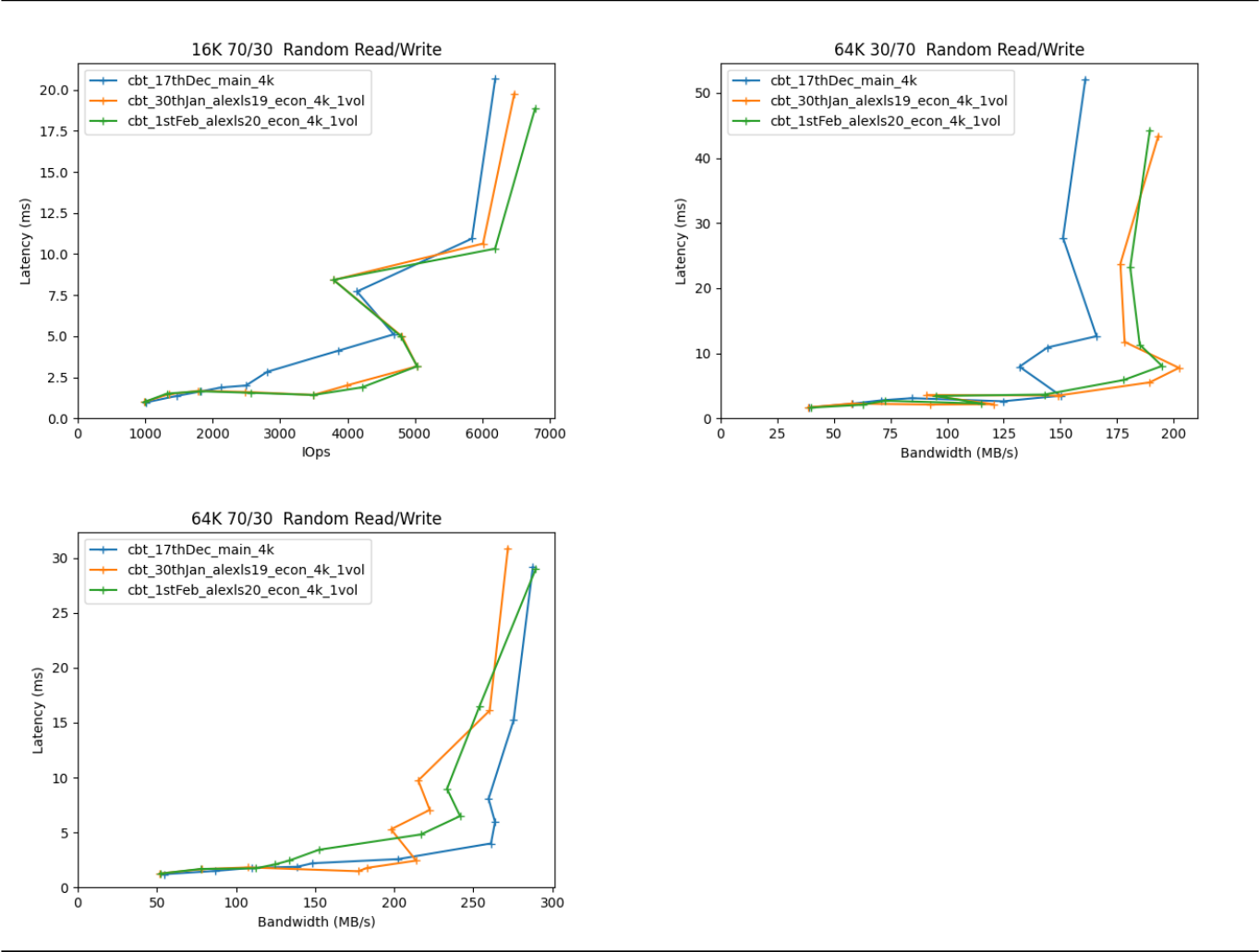


Random Write





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

```

librbdfio:
  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: 420000
  volumes_per_client:
    - 1
  workloads:
    16k7030:
      iodepth:
        - 1
        - 2
        - 3
        - 4
        - 5
        - 8
        - 16
        - 24
        - 32
        - 64
        - 128
      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:
        - 4
        - 8
        - 12
        - 16
        - 24

```

```

- 48
- 64
- 128
- 256
- 384
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
- 8
- 16
- 24
- 32
- 64
- 128
jobname: randwrite
mode: randwrite
numjobs:
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
op_size: 16384
1Mrandomread:
iodepth:
- 1
- 2
- 3
- 4
- 8
- 12
- 16
- 20
- 24
- 28
- 32
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
    - 8
    - 12
    - 16
    - 20
    - 24
    - 28
    - 32
  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
    - 6
    - 8
    - 10
    - 12
    - 14
    - 16
    - 20
  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
    - 6
    - 8
    - 10
    - 12
    - 14
    - 16
    - 20
  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
    - 8
    - 16
    - 24
    - 32
    - 64
    - 128
  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
  - 8
  - 16
  - 24
  - 32
  - 64
  - 128
  jobname: randwrite
  mode: randwrite
  numjobs:
  - 1
  - 1
  - 1
  - 1
  - 1
  - 1
  - 1
  - 1
  - 1
  - 1
  op_size: 262144
32krandomread:
  iodepth:
  - 2
  - 4
  - 6
  - 8
  - 12
  - 16
  - 24
  - 32
  - 64
  - 128
  - 256
  jobname: randread
  mode: randread
  numjobs:
  - 1
  - 1
  - 1
  - 1
  - 1
  - 1
  - 1
  - 1
  - 1
  - 1
  - 1
  op_size: 32768
32krandomwrite:
  iodepth:
  - 1
  - 2
  - 3
  - 4
  - 5
  - 8

```



```

- 16
- 24
- 32
- 64
- 128
jobname: randwrite
mode: randwrite
numjobs:
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
op_size: 32768
4krandomread:
  iodepth:
- 4
- 8
- 12
- 16
- 32
- 48
- 64
- 128
- 256
- 384
  jobname: randread
  mode: randread
  numjobs:
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
op_size: 4096
4krandomwrite:
  iodepth:
- 1
- 2
- 3
- 4
- 5
- 8
- 16
- 24
- 32
- 64
- 128
  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
    - 8
    - 16
    - 24
    - 32
    - 40
    - 48
    - 64
  jobname: randread
  mode: randread
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
  op_size: 524288
512krandomwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 8
    - 16
    - 24
    - 32
    - 40
    - 48
    - 64
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1

```

```

- 1
- 1
- 1
- 1
  op_size: 524288
512kseqread:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 6
    - 8
    - 12
    - 16
    - 20
    - 24
    - 32
  jobname: seqread
  mode: read
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
  op_size: 524288
512kseqwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 6
    - 8
    - 12
    - 16
    - 20
    - 24
    - 32
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
  op_size: 524288
64k3070:
  iodepth:

```

```

- 1
- 2
- 3
- 4
- 5
- 8
- 16
- 24
- 32
- 64
- 128
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
  - 8
  - 16
  - 24
  - 32
  - 64
  - 128
  jobname: randmix
  mode: randrw
  numjobs:
  - 1
  - 1
  - 1
  - 1
  - 1
  - 1
  - 1
  - 1
  - 1
  - 1
  - 1
  op_size: 65536
  rwmixread: 70
64krandomread:
  iodepth:
  - 2
  - 4
  - 6
  - 8
  - 12

```

```

- 16
- 24
- 32
- 64
- 128
- 256
jobname: randread
mode: randread
numjobs:
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
op_size: 65536
64krandomwrite:
  iodepth:
- 1
- 2
- 3
- 4
- 5
- 8
- 16
- 24
- 32
- 64
- 128
  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
- 16
- 24
- 32
- 64
- 128
- 192
- 256
  jobname: read

```

```

mode: read
numjobs:
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
op_size: 65536
64kseqwrite:
iodepth:
- 1
- 2
- 3
- 4
- 5
- 8
- 16
- 24
- 32
- 64
- 128
jobname: write
mode: write
numjobs:
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
op_size: 65536
8krandomread:
iodepth:
- 4
- 8
- 12
- 16
- 32
- 48
- 64
- 128
- 256
- 384
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
    - 8
    - 16
    - 24
    - 32
    - 64
    - 128
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
  op_size: 8192
precondition:
  iodepth:
    - 4
  jobname: precond1rw
  mode: randwrite
  monitor: false
  numjobs:
    - 1
  op_size: 65536
  precondition: true
seq16kread:
  iodepth:
    - 2
    - 4
    - 8
    - 12
    - 16
    - 24
    - 32
    - 64
    - 96
    - 128
    - 192
  jobname: seqread
  mode: read
  numjobs:
    - 1
    - 1
    - 1

```

```

- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
  op_size: 16384
seq16kwrite:
  iodepth:
    - 2
    - 4
    - 8
    - 12
    - 16
    - 24
    - 32
    - 64
    - 96
    - 128
    - 192
  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
    - 8
    - 16
    - 24
    - 32
    - 48
    - 64
  jobname: seqread
  mode: read
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1

```



```

- 1
  op_size: 262144
seq256kwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 5
    - 8
    - 12
    - 16
    - 24
    - 32
    - 48
    - 64
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    op_size: 262144
seq32kread:
  iodepth:
    - 2
    - 4
    - 8
    - 12
    - 16
    - 24
    - 32
    - 64
    - 96
    - 128
    - 192
  jobname: seqread
  mode: read
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    op_size: 32768
seq32kwrite:
  iodepth:
    - 1
    - 2
    - 3

```

```

- 4
- 5
- 8
- 16
- 24
- 32
- 64
- 128
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    op_size: 32768
  seq4kread:
    iodepth:
      - 2
      - 4
      - 8
      - 12
      - 16
      - 24
      - 32
      - 64
      - 96
      - 128
      - 192
    jobname: seqread
    mode: read
    numjobs:
      - 1
      - 1
      - 1
      - 1
      - 1
      - 1
      - 1
      - 1
      - 1
      - 1
      - 1
      - 1
      op_size: 4096
  seq4kwrite:
    iodepth:
      - 2
      - 4
      - 8
      - 12
      - 16
      - 24
      - 32
      - 64
      - 96
      - 128

```

```

- 192
- 256
jobname: seqwrite
mode: write
numjobs:
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
op_size: 4096
seq8kread:
iodepth:
- 2
- 4
- 8
- 12
- 16
- 24
- 32
- 64
- 96
- 128
- 192
jobname: seqread
mode: read
numjobs:
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
op_size: 8192
seq8kwrite:
iodepth:
- 2
- 4
- 8
- 12
- 16
- 24
- 32
- 64
- 96
- 128
- 192
- 256
jobname: seqwrite
mode: write
numjobs:

```

```

- 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}
  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: 420000
volumes_per_client:
- 1
workloads:
  16k7030:
    iodepth:
      - 1
      - 2
      - 3
      - 4
      - 5
      - 8
      - 16
      - 24
      - 32
      - 64
      - 128
    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:
      - 4
      - 8
      - 12
      - 16
      - 24
      - 48
      - 64
      - 128
      - 256
      - 384
    jobname: randread
    mode: randread
    numjobs:
      - 1
      - 1
      - 1
      - 1
      - 1
      - 1
      - 1
      - 1
      - 1
      - 1
      - 1
      - 1
      - 1
      - 1
      - 1

```

```

- 1
- 1
  op_size: 16384
16krandomwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 16
    - 24
    - 32
    - 64
    - 128
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    op_size: 16384
1Mrandomread:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 8
    - 12
    - 16
    - 20
    - 24
    - 28
    - 32
  jobname: randread
  mode: randread
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    op_size: 1048576
1Mrandomwrite:
  iodepth:
    - 1
    - 2

```

```

- 3
- 4
- 8
- 12
- 16
- 20
- 24
- 28
- 32
  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
    - 6
    - 8
    - 10
    - 12
    - 14
    - 16
    - 20
  jobname: seqread
  mode: read
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
  op_size: 1048576
1Mseqwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 6
    - 8
    - 10
    - 12
    - 14

```

```

- 16
- 20
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
- 8
- 16
- 24
- 32
- 64
- 128
jobname: randread
mode: randread
numjobs:
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
op_size: 262144
256krandomwrite:
iodepth:
- 1
- 2
- 3
- 4
- 5
- 8
- 16
- 24
- 32
- 64
- 128
jobname: randwrite
mode: randwrite
numjobs:
- 1
- 1

```



```

- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
  op_size: 262144
32krandomread:
  iodepth:
    - 2
    - 4
    - 6
    - 8
    - 12
    - 16
    - 24
    - 32
    - 64
    - 128
    - 256
  jobname: randread
  mode: randread
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
  op_size: 32768
32krandomwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 16
    - 24
    - 32
    - 64
    - 128
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1

```

```

- 1
- 1
op_size: 32768
4krandomread:
  iodepth:
    - 4
    - 8
    - 12
    - 16
    - 32
    - 48
    - 64
    - 128
    - 256
    - 384
  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
    - 8
    - 16
    - 24
    - 32
    - 64
    - 128
  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
- 8
- 16
- 24
- 32
- 40
- 48
- 64
  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
    - 8
    - 16
    - 24
    - 32
    - 40
    - 48
    - 64
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
  op_size: 524288
512kseqread:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 6
    - 8
    - 12
    - 16
    - 20
    - 24

```

```

- 32
  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
    - 6
    - 8
    - 12
    - 16
    - 20
    - 24
    - 32
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
  op_size: 524288
64k3070:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 16
    - 24
    - 32
    - 64
    - 128
  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
    - 8
    - 16
    - 24
    - 32
    - 64
    - 128
  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
    - 12
    - 16
    - 24
    - 32
    - 64
    - 128
    - 256
  jobname: randread
  mode: randread
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1

```

```

- 1
- 1
- 1
  op_size: 65536
64krandomwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 16
    - 24
    - 32
    - 64
    - 128
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
  op_size: 65536
64kseqread:
  iodepth:
    - 2
    - 4
    - 6
    - 8
    - 16
    - 24
    - 32
    - 64
    - 128
    - 192
    - 256
  jobname: read
  mode: read
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
  op_size: 65536
64kseqwrite:
  iodepth:
    - 1

```

```

- 2
- 3
- 4
- 5
- 8
- 16
- 24
- 32
- 64
- 128
  jobname: write
  mode: write
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
  op_size: 65536
8krandomread:
  iodepth:
    - 4
    - 8
    - 12
    - 16
    - 32
    - 48
    - 64
    - 128
    - 256
    - 384
  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
    - 8
    - 16
    - 24
    - 32

```

```

- 64
- 128
jobname: randwrite
mode: randwrite
numjobs:
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
op_size: 8192
precondition:
  iodepth:
  - 4
  jobname: precond1rw
  mode: randwrite
  monitor: false
  numjobs:
  - 1
  op_size: 65536
  precondition: true
seq16kread:
  iodepth:
  - 2
  - 4
  - 8
  - 12
  - 16
  - 24
  - 32
  - 64
  - 96
  - 128
  - 192
  jobname: seqread
  mode: read
  numjobs:
  - 1
  - 1
  - 1
  - 1
  - 1
  - 1
  - 1
  - 1
  - 1
  - 1
  - 1
  op_size: 16384
seq16kwrite:
  iodepth:
  - 2
  - 4
  - 8
  - 12
  - 16
  - 24

```



```

- 32
- 64
- 96
- 128
- 192
jobname: seqwrite
mode: write
numjobs:
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
op_size: 16384
seq256kread:
iodepth:
- 1
- 2
- 3
- 4
- 5
- 8
- 16
- 24
- 32
- 48
- 64
jobname: seqread
mode: read
numjobs:
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
- 1
op_size: 262144
seq256kwrite:
iodepth:
- 1
- 2
- 3
- 5
- 8
- 12
- 16
- 24
- 32
- 48
- 64
jobname: seqwrite
mode: write

```

```

  numjobs:
  - 1
  - 1
  - 1
  - 1
  - 1
  - 1
  - 1
  - 1
  - 1
  - 1
  - 1
  op_size: 262144
seq32kread:
  iodepth:
  - 2
  - 4
  - 8
  - 12
  - 16
  - 24
  - 32
  - 64
  - 96
  - 128
  - 192
  jobname: seqread
  mode: read
  numjobs:
  - 1
  - 1
  - 1
  - 1
  - 1
  - 1
  - 1
  - 1
  - 1
  - 1
  - 1
  - 1
  - 1
  op_size: 32768
seq32kwrite:
  iodepth:
  - 1
  - 2
  - 3
  - 4
  - 5
  - 8
  - 16
  - 24
  - 32
  - 64
  - 128
  jobname: seqwrite
  mode: write
  numjobs:
  - 1
  - 1
  - 1
  - 1
  - 1
  - 1

```

```

- 1
- 1
- 1
- 1
- 1
  op_size: 32768
seq4kread:
  iodepth:
    - 2
    - 4
    - 8
    - 12
    - 16
    - 24
    - 32
    - 64
    - 96
    - 128
    - 192
  jobname: seqread
  mode: read
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
  op_size: 4096
seq4kwrite:
  iodepth:
    - 2
    - 4
    - 8
    - 12
    - 16
    - 24
    - 32
    - 64
    - 96
    - 128
    - 192
    - 256
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1
    - 1

```

```

    op_size: 4096
  seq8kread:
    iodepth:
      - 2
      - 4
      - 8
      - 12
      - 16
      - 24
      - 32
      - 64
      - 96
      - 128
      - 192
    jobname: seqread
    mode: read
    numjobs:
      - 1
      - 1
      - 1
      - 1
      - 1
      - 1
      - 1
      - 1
      - 1
      - 1
      - 1
    op_size: 8192
  seq8kwrite:
    iodepth:
      - 2
      - 4
      - 8
      - 12
      - 16
      - 24
      - 32
      - 64
      - 96
      - 128
      - 192
      - 256
    jobname: seqwrite
    mode: write
    numjobs:
      - 1
      - 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

```

librbdfio:
  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: 420000
  volumes_per_client:
    - 1
  workloads:
    16k7030:
      iodepth:
        - 1
        - 2
        - 3
        - 4
        - 5
        - 8
        - 16
        - 24
        - 32
        - 64
        - 128
      jobname: randmix
      mode: randrw
      numjobs:
        - 1
      op_size: 16384
      rwmixread: 70
    16krandomread:
      iodepth:
        - 4
        - 8
        - 12
        - 16
        - 24
        - 48
        - 64
        - 128
        - 256
        - 384
      jobname: randread
      mode: randread
      numjobs:
        - 1
      op_size: 16384

```

```

16krandomwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 16
    - 24
    - 32
    - 64
    - 128
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
  op_size: 16384
1Mrandomread:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 8
    - 12
    - 16
    - 20
    - 24
    - 28
    - 32
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 1048576
1Mrandomwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 8
    - 12
    - 16
    - 20
    - 24
    - 28
    - 32
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
  op_size: 1048576
1Mseqread:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 6
    - 8
    - 10

```

```

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

```



```

32krandomread:
  iodepth:
    - 2
    - 4
    - 6
    - 8
    - 12
    - 16
    - 24
    - 32
    - 64
    - 128
    - 256
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 32768
32krandomwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 16
    - 24
    - 32
    - 64
    - 128
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
  op_size: 32768
4krandomread:
  iodepth:
    - 4
    - 8
    - 12
    - 16
    - 32
    - 48
    - 64
    - 128
    - 256
    - 384
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 4096
4krandomwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 16
    - 24

```

```

- 32
- 64
- 128
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
  op_size: 4096
512krandomread:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 8
    - 16
    - 24
    - 32
    - 40
    - 48
    - 64
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 524288
512krandomwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 8
    - 16
    - 24
    - 32
    - 40
    - 48
    - 64
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
  op_size: 524288
512kseqread:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 6
    - 8
    - 12
    - 16
    - 20
    - 24
    - 32
  jobname: seqread
  mode: read
  numjobs:
    - 1
  op_size: 524288
512kseqwrite:

```

```

  iodepth:
  - 1
  - 2
  - 3
  - 4
  - 6
  - 8
  - 12
  - 16
  - 20
  - 24
  - 32
  jobname: seqwrite
  mode: write
  numjobs:
  - 1
  op_size: 524288
64k3070:
  iodepth:
  - 1
  - 2
  - 3
  - 4
  - 5
  - 8
  - 16
  - 24
  - 32
  - 64
  - 128
  jobname: randmix
  mode: randrw
  numjobs:
  - 1
  op_size: 65536
  rwmixread: 30
64k7030:
  iodepth:
  - 1
  - 2
  - 3
  - 4
  - 5
  - 8
  - 16
  - 24
  - 32
  - 64
  - 128
  jobname: randmix
  mode: randrw
  numjobs:
  - 1
  op_size: 65536
  rwmixread: 70
64krandomread:
  iodepth:
  - 2
  - 4
  - 6
  - 8
  - 12
  - 16

```

```

- 24
- 32
- 64
- 128
- 256
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 65536
64krandomwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 16
    - 24
    - 32
    - 64
    - 128
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
  op_size: 65536
64kseqread:
  iodepth:
    - 2
    - 4
    - 6
    - 8
    - 16
    - 24
    - 32
    - 64
    - 128
    - 192
    - 256
  jobname: read
  mode: read
  numjobs:
    - 1
  op_size: 65536
64kseqwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 16
    - 24
    - 32
    - 64
    - 128
  jobname: write
  mode: write
  numjobs:
    - 1

```

```

    op_size: 65536
8krandomread:
  iodepth:
    - 4
    - 8
    - 12
    - 16
    - 32
    - 48
    - 64
    - 128
    - 256
    - 384
  jobname: randread
  mode: randread
  numjobs:
    - 1
    op_size: 8192
8krandomwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 16
    - 24
    - 32
    - 64
    - 128
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
    op_size: 8192
precondition:
  iodepth:
    - 4
  jobname: precond1rw
  mode: randwrite
  monitor: false
  numjobs:
    - 1
    op_size: 65536
  precondition: true
seq16kread:
  iodepth:
    - 2
    - 4
    - 8
    - 12
    - 16
    - 24
    - 32
    - 64
    - 96
    - 128
    - 192
  jobname: seqread
  mode: read
  numjobs:
    - 1

```

```

    op_size: 16384
seq16kwrite:
  iodepth:
    - 2
    - 4
    - 8
    - 12
    - 16
    - 24
    - 32
    - 64
    - 96
    - 128
    - 192
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
    op_size: 16384
seq256kread:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 16
    - 24
    - 32
    - 48
    - 64
  jobname: seqread
  mode: read
  numjobs:
    - 1
    op_size: 262144
seq256kwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 5
    - 8
    - 12
    - 16
    - 24
    - 32
    - 48
    - 64
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
    op_size: 262144
seq32kread:
  iodepth:
    - 2
    - 4
    - 8
    - 12
    - 16
    - 24

```

```

- 32
- 64
- 96
- 128
- 192
  jobname: seqread
  mode: read
  numjobs:
    - 1
  op_size: 32768
seq32kwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 16
    - 24
    - 32
    - 64
    - 128
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
  op_size: 32768
seq4kread:
  iodepth:
    - 2
    - 4
    - 8
    - 12
    - 16
    - 24
    - 32
    - 64
    - 96
    - 128
    - 192
  jobname: seqread
  mode: read
  numjobs:
    - 1
  op_size: 4096
seq4kwrite:
  iodepth:
    - 2
    - 4
    - 8
    - 12
    - 16
    - 24
    - 32
    - 64
    - 96
    - 128
    - 192
    - 256
  jobname: seqwrite
  mode: write
  numjobs:

```

```

    - 1
      op_size: 4096
    seq8kread:
      iodepth:
        - 2
        - 4
        - 8
        - 12
        - 16
        - 24
        - 32
        - 64
        - 96
        - 128
        - 192
      jobname: seqread
      mode: read
      numjobs:
        - 1
      op_size: 8192
    seq8kwrite:
      iodepth:
        - 2
        - 4
        - 8
        - 12
        - 16
        - 24
        - 32
        - 64
        - 96
        - 128
        - 192
        - 256
      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: 420000
    volumes_per_client:
      - 1
    workloads:
      16k7030:
        iodepth:
          - 1
          - 2
          - 3
          - 4
          - 5
          - 8
          - 16
          - 24
          - 32
          - 64
          - 128
        jobname: randmix
        mode: randrw
        numjobs:
          - 1
        op_size: 16384
        rwmixread: 70
      16k randomread:
        iodepth:
          - 4
          - 8
          - 12
          - 16
          - 24
          - 48

```

```

- 64
- 128
- 256
- 384
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 16384
16krandomwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 16
    - 24
    - 32
    - 64
    - 128
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
  op_size: 16384
1Mrandomread:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 8
    - 12
    - 16
    - 20
    - 24
    - 28
    - 32
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 1048576
1Mrandomwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 8
    - 12
    - 16
    - 20
    - 24
    - 28
    - 32
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
  op_size: 1048576

```

```

1Mseqread:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 6
    - 8
    - 10
    - 12
    - 14
    - 16
    - 20
  jobname: seqread
  mode: read
  numjobs:
    - 1
  op_size: 1048576
1Mseqwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 6
    - 8
    - 10
    - 12
    - 14
    - 16
    - 20
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
  op_size: 1048576
256krandomread:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 16
    - 24
    - 32
    - 64
    - 128
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 262144
256krandomwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 16

```

```

- 24
- 32
- 64
- 128
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
  op_size: 262144
32krandomread:
  iodepth:
    - 2
    - 4
    - 6
    - 8
    - 12
    - 16
    - 24
    - 32
    - 64
    - 128
    - 256
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 32768
32krandomwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 16
    - 24
    - 32
    - 64
    - 128
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
  op_size: 32768
4krandomread:
  iodepth:
    - 4
    - 8
    - 12
    - 16
    - 32
    - 48
    - 64
    - 128
    - 256
    - 384
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 4096
4krandomwrite:

```

```

  iodepth:
  - 1
  - 2
  - 3
  - 4
  - 5
  - 8
  - 16
  - 24
  - 32
  - 64
  - 128
  jobname: randwrite
  mode: randwrite
  numjobs:
  - 1
  op_size: 4096
512krandomread:
  iodepth:
  - 1
  - 2
  - 3
  - 4
  - 8
  - 16
  - 24
  - 32
  - 40
  - 48
  - 64
  jobname: randread
  mode: randread
  numjobs:
  - 1
  op_size: 524288
512krandomwrite:
  iodepth:
  - 1
  - 2
  - 3
  - 4
  - 8
  - 16
  - 24
  - 32
  - 40
  - 48
  - 64
  jobname: randwrite
  mode: randwrite
  numjobs:
  - 1
  op_size: 524288
512kseqread:
  iodepth:
  - 1
  - 2
  - 3
  - 4
  - 6
  - 8
  - 12
  - 16

```

```

- 20
- 24
- 32
  jobname: seqread
  mode: read
  numjobs:
    - 1
  op_size: 524288
512kseqwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 6
    - 8
    - 12
    - 16
    - 20
    - 24
    - 32
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
  op_size: 524288
64k3070:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 16
    - 24
    - 32
    - 64
    - 128
  jobname: randmix
  mode: randrw
  numjobs:
    - 1
  op_size: 65536
  rwmixread: 30
64k7030:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 16
    - 24
    - 32
    - 64
    - 128
  jobname: randmix
  mode: randrw
  numjobs:
    - 1
  op_size: 65536

```

```

    rwmixread: 70
64krandomread:
  iodepth:
    - 2
    - 4
    - 6
    - 8
    - 12
    - 16
    - 24
    - 32
    - 64
    - 128
    - 256
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 65536
64krandomwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 16
    - 24
    - 32
    - 64
    - 128
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
  op_size: 65536
64kseqread:
  iodepth:
    - 2
    - 4
    - 6
    - 8
    - 16
    - 24
    - 32
    - 64
    - 128
    - 192
    - 256
  jobname: read
  mode: read
  numjobs:
    - 1
  op_size: 65536
64kseqwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8

```

```

- 16
- 24
- 32
- 64
- 128
  jobname: write
  mode: write
  numjobs:
    - 1
  op_size: 65536
8krandomread:
  iodepth:
    - 4
    - 8
    - 12
    - 16
    - 32
    - 48
    - 64
    - 128
    - 256
    - 384
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 8192
8krandomwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 16
    - 24
    - 32
    - 64
    - 128
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
  op_size: 8192
precondition:
  iodepth:
    - 4
  jobname: precond1rw
  mode: randwrite
  monitor: false
  numjobs:
    - 1
  op_size: 65536
  precondition: true
seq16kread:
  iodepth:
    - 2
    - 4
    - 8
    - 12
    - 16
    - 24

```



```

- 32
- 64
- 96
- 128
- 192
  jobname: seqread
  mode: read
  numjobs:
    - 1
  op_size: 16384
seq16kwrite:
  iodepth:
    - 2
    - 4
    - 8
    - 12
    - 16
    - 24
    - 32
    - 64
    - 96
    - 128
    - 192
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
  op_size: 16384
seq256kread:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 16
    - 24
    - 32
    - 48
    - 64
  jobname: seqread
  mode: read
  numjobs:
    - 1
  op_size: 262144
seq256kwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 5
    - 8
    - 12
    - 16
    - 24
    - 32
    - 48
    - 64
  jobname: seqwrite
  mode: write
  numjobs:
    - 1

```

```

    op_size: 262144
seq32kread:
  iodepth:
    - 2
    - 4
    - 8
    - 12
    - 16
    - 24
    - 32
    - 64
    - 96
    - 128
    - 192
  jobname: seqread
  mode: read
  numjobs:
    - 1
    op_size: 32768
seq32kwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 16
    - 24
    - 32
    - 64
    - 128
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
    op_size: 32768
seq4kread:
  iodepth:
    - 2
    - 4
    - 8
    - 12
    - 16
    - 24
    - 32
    - 64
    - 96
    - 128
    - 192
  jobname: seqread
  mode: read
  numjobs:
    - 1
    op_size: 4096
seq4kwrite:
  iodepth:
    - 2
    - 4
    - 8
    - 12
    - 16
    - 24

```

```

- 32
- 64
- 96
- 128
- 192
- 256
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
  op_size: 4096
seq8kread:
  iodepth:
    - 2
    - 4
    - 8
    - 12
    - 16
    - 24
    - 32
    - 64
    - 96
    - 128
    - 192
  jobname: seqread
  mode: read
  numjobs:
    - 1
  op_size: 8192
seq8kwrite:
  iodepth:
    - 2
    - 4
    - 8
    - 12
    - 16
    - 24
    - 32
    - 64
    - 96
    - 128
    - 192
    - 256
  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}

```

results

```

librbdfio:
  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: 420000
  volumes_per_client:
    - 1
  workloads:
    16k7030:
      iodepth:
        - 1
        - 2
        - 3
        - 4
        - 5
        - 8
        - 16
        - 24
        - 32
        - 64
        - 128
      jobname: randmix
      mode: randrw
      numjobs:
        - 1
      op_size: 16384
      rwmixread: 70
    16krandomread:
      iodepth:
        - 4
        - 8
        - 12
        - 16
        - 24
        - 48
        - 64
        - 128
        - 256
        - 384
      jobname: randread
      mode: randread
      numjobs:
        - 1
      op_size: 16384

```

```

16krandomwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 16
    - 24
    - 32
    - 64
    - 128
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
  op_size: 16384
1Mrandomread:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 8
    - 12
    - 16
    - 20
    - 24
    - 28
    - 32
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 1048576
1Mrandomwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 8
    - 12
    - 16
    - 20
    - 24
    - 28
    - 32
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
  op_size: 1048576
1Mseqread:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 6
    - 8
    - 10

```

```

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

```

```

32krandomread:
  iodepth:
    - 2
    - 4
    - 6
    - 8
    - 12
    - 16
    - 24
    - 32
    - 64
    - 128
    - 256
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 32768
32krandomwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 16
    - 24
    - 32
    - 64
    - 128
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
  op_size: 32768
4krandomread:
  iodepth:
    - 4
    - 8
    - 12
    - 16
    - 32
    - 48
    - 64
    - 128
    - 256
    - 384
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 4096
4krandomwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 16
    - 24

```



```

- 32
- 64
- 128
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
  op_size: 4096
512krandomread:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 8
    - 16
    - 24
    - 32
    - 40
    - 48
    - 64
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 524288
512krandomwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 8
    - 16
    - 24
    - 32
    - 40
    - 48
    - 64
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
  op_size: 524288
512kseqread:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 6
    - 8
    - 12
    - 16
    - 20
    - 24
    - 32
  jobname: seqread
  mode: read
  numjobs:
    - 1
  op_size: 524288
512kseqwrite:

```

```

  iodepth:
  - 1
  - 2
  - 3
  - 4
  - 6
  - 8
  - 12
  - 16
  - 20
  - 24
  - 32
  jobname: seqwrite
  mode: write
  numjobs:
  - 1
  op_size: 524288
64k3070:
  iodepth:
  - 1
  - 2
  - 3
  - 4
  - 5
  - 8
  - 16
  - 24
  - 32
  - 64
  - 128
  jobname: randmix
  mode: randrw
  numjobs:
  - 1
  op_size: 65536
  rwmixread: 30
64k7030:
  iodepth:
  - 1
  - 2
  - 3
  - 4
  - 5
  - 8
  - 16
  - 24
  - 32
  - 64
  - 128
  jobname: randmix
  mode: randrw
  numjobs:
  - 1
  op_size: 65536
  rwmixread: 70
64krandomread:
  iodepth:
  - 2
  - 4
  - 6
  - 8
  - 12
  - 16

```

```

- 24
- 32
- 64
- 128
- 256
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 65536
64krandomwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 16
    - 24
    - 32
    - 64
    - 128
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
  op_size: 65536
64kseqread:
  iodepth:
    - 2
    - 4
    - 6
    - 8
    - 16
    - 24
    - 32
    - 64
    - 128
    - 192
    - 256
  jobname: read
  mode: read
  numjobs:
    - 1
  op_size: 65536
64kseqwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 16
    - 24
    - 32
    - 64
    - 128
  jobname: write
  mode: write
  numjobs:
    - 1

```

```

    op_size: 65536
8krandomread:
  iodepth:
    - 4
    - 8
    - 12
    - 16
    - 32
    - 48
    - 64
    - 128
    - 256
    - 384
  jobname: randread
  mode: randread
  numjobs:
    - 1
    op_size: 8192
8krandomwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 16
    - 24
    - 32
    - 64
    - 128
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
    op_size: 8192
precondition:
  iodepth:
    - 4
  jobname: precond1rw
  mode: randwrite
  monitor: false
  numjobs:
    - 1
    op_size: 65536
  precondition: true
seq16kread:
  iodepth:
    - 2
    - 4
    - 8
    - 12
    - 16
    - 24
    - 32
    - 64
    - 96
    - 128
    - 192
  jobname: seqread
  mode: read
  numjobs:
    - 1

```

```

    op_size: 16384
seq16kwrite:
  iodepth:
    - 2
    - 4
    - 8
    - 12
    - 16
    - 24
    - 32
    - 64
    - 96
    - 128
    - 192
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
    op_size: 16384
seq256kread:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 16
    - 24
    - 32
    - 48
    - 64
  jobname: seqread
  mode: read
  numjobs:
    - 1
    op_size: 262144
seq256kwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 5
    - 8
    - 12
    - 16
    - 24
    - 32
    - 48
    - 64
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
    op_size: 262144
seq32kread:
  iodepth:
    - 2
    - 4
    - 8
    - 12
    - 16
    - 24

```

```

- 32
- 64
- 96
- 128
- 192
  jobname: seqread
  mode: read
  numjobs:
    - 1
  op_size: 32768
seq32kwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 16
    - 24
    - 32
    - 64
    - 128
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
  op_size: 32768
seq4kread:
  iodepth:
    - 2
    - 4
    - 8
    - 12
    - 16
    - 24
    - 32
    - 64
    - 96
    - 128
    - 192
  jobname: seqread
  mode: read
  numjobs:
    - 1
  op_size: 4096
seq4kwrite:
  iodepth:
    - 2
    - 4
    - 8
    - 12
    - 16
    - 24
    - 32
    - 64
    - 96
    - 128
    - 192
    - 256
  jobname: seqwrite
  mode: write
  numjobs:

```

```

    - 1
      op_size: 4096
    seq8kread:
      iodepth:
        - 2
        - 4
        - 8
        - 12
        - 16
        - 24
        - 32
        - 64
        - 96
        - 128
        - 192
      jobname: seqread
      mode: read
      numjobs:
        - 1
      op_size: 8192
    seq8kwrite:
      iodepth:
        - 2
        - 4
        - 8
        - 12
        - 16
        - 24
        - 32
        - 64
        - 96
        - 128
        - 192
        - 256
      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: 420000
    volumes_per_client:
      - 1
    workloads:
      16k7030:
        iodepth:
          - 1
          - 2
          - 3
          - 4
          - 5
          - 8
          - 16
          - 24
          - 32
          - 64
          - 128
        jobname: randmix
        mode: randrw
        numjobs:
          - 1
        op_size: 16384
        rwmixread: 70
      16k randomread:
        iodepth:
          - 4
          - 8
          - 12
          - 16
          - 24
          - 48

```



```

- 64
- 128
- 256
- 384
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 16384
16krandomwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 16
    - 24
    - 32
    - 64
    - 128
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
  op_size: 16384
1Mrandomread:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 8
    - 12
    - 16
    - 20
    - 24
    - 28
    - 32
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 1048576
1Mrandomwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 8
    - 12
    - 16
    - 20
    - 24
    - 28
    - 32
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
  op_size: 1048576

```

```

1Mseqread:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 6
    - 8
    - 10
    - 12
    - 14
    - 16
    - 20
  jobname: seqread
  mode: read
  numjobs:
    - 1
  op_size: 1048576
1Mseqwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 6
    - 8
    - 10
    - 12
    - 14
    - 16
    - 20
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
  op_size: 1048576
256krandomread:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 16
    - 24
    - 32
    - 64
    - 128
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 262144
256krandomwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 16

```

```

- 24
- 32
- 64
- 128
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
  op_size: 262144
32krandomread:
  iodepth:
    - 2
    - 4
    - 6
    - 8
    - 12
    - 16
    - 24
    - 32
    - 64
    - 128
    - 256
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 32768
32krandomwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 16
    - 24
    - 32
    - 64
    - 128
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
  op_size: 32768
4krandomread:
  iodepth:
    - 4
    - 8
    - 12
    - 16
    - 32
    - 48
    - 64
    - 128
    - 256
    - 384
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 4096
4krandomwrite:

```

```

  iodepth:
  - 1
  - 2
  - 3
  - 4
  - 5
  - 8
  - 16
  - 24
  - 32
  - 64
  - 128
  jobname: randwrite
  mode: randwrite
  numjobs:
  - 1
  op_size: 4096
512krandomread:
  iodepth:
  - 1
  - 2
  - 3
  - 4
  - 8
  - 16
  - 24
  - 32
  - 40
  - 48
  - 64
  jobname: randread
  mode: randread
  numjobs:
  - 1
  op_size: 524288
512krandomwrite:
  iodepth:
  - 1
  - 2
  - 3
  - 4
  - 8
  - 16
  - 24
  - 32
  - 40
  - 48
  - 64
  jobname: randwrite
  mode: randwrite
  numjobs:
  - 1
  op_size: 524288
512kseqread:
  iodepth:
  - 1
  - 2
  - 3
  - 4
  - 6
  - 8
  - 12
  - 16

```

```

- 20
- 24
- 32
  jobname: seqread
  mode: read
  numjobs:
    - 1
  op_size: 524288
512kseqwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 6
    - 8
    - 12
    - 16
    - 20
    - 24
    - 32
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
  op_size: 524288
64k3070:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 16
    - 24
    - 32
    - 64
    - 128
  jobname: randmix
  mode: randrw
  numjobs:
    - 1
  op_size: 65536
  rwmixread: 30
64k7030:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 16
    - 24
    - 32
    - 64
    - 128
  jobname: randmix
  mode: randrw
  numjobs:
    - 1
  op_size: 65536

```

```

    rwmixread: 70
64krandomread:
  iodepth:
    - 2
    - 4
    - 6
    - 8
    - 12
    - 16
    - 24
    - 32
    - 64
    - 128
    - 256
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 65536
64krandomwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 16
    - 24
    - 32
    - 64
    - 128
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
  op_size: 65536
64kseqread:
  iodepth:
    - 2
    - 4
    - 6
    - 8
    - 16
    - 24
    - 32
    - 64
    - 128
    - 192
    - 256
  jobname: read
  mode: read
  numjobs:
    - 1
  op_size: 65536
64kseqwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8

```

```

- 16
- 24
- 32
- 64
- 128
  jobname: write
  mode: write
  numjobs:
    - 1
  op_size: 65536
8krandomread:
  iodepth:
    - 4
    - 8
    - 12
    - 16
    - 32
    - 48
    - 64
    - 128
    - 256
    - 384
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 8192
8krandomwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 16
    - 24
    - 32
    - 64
    - 128
  jobname: randwrite
  mode: randwrite
  numjobs:
    - 1
  op_size: 8192
precondition:
  iodepth:
    - 4
  jobname: precond1rw
  mode: randwrite
  monitor: false
  numjobs:
    - 1
  op_size: 65536
  precondition: true
seq16kread:
  iodepth:
    - 2
    - 4
    - 8
    - 12
    - 16
    - 24

```

```

- 32
- 64
- 96
- 128
- 192
  jobname: seqread
  mode: read
  numjobs:
    - 1
  op_size: 16384
seq16kwrite:
  iodepth:
    - 2
    - 4
    - 8
    - 12
    - 16
    - 24
    - 32
    - 64
    - 96
    - 128
    - 192
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
  op_size: 16384
seq256kread:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 16
    - 24
    - 32
    - 48
    - 64
  jobname: seqread
  mode: read
  numjobs:
    - 1
  op_size: 262144
seq256kwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 5
    - 8
    - 12
    - 16
    - 24
    - 32
    - 48
    - 64
  jobname: seqwrite
  mode: write
  numjobs:
    - 1

```



```

    op_size: 262144
seq32kread:
  iodepth:
    - 2
    - 4
    - 8
    - 12
    - 16
    - 24
    - 32
    - 64
    - 96
    - 128
    - 192
  jobname: seqread
  mode: read
  numjobs:
    - 1
    op_size: 32768
seq32kwrite:
  iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 16
    - 24
    - 32
    - 64
    - 128
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
    op_size: 32768
seq4kread:
  iodepth:
    - 2
    - 4
    - 8
    - 12
    - 16
    - 24
    - 32
    - 64
    - 96
    - 128
    - 192
  jobname: seqread
  mode: read
  numjobs:
    - 1
    op_size: 4096
seq4kwrite:
  iodepth:
    - 2
    - 4
    - 8
    - 12
    - 16
    - 24

```

```

- 32
- 64
- 96
- 128
- 192
- 256
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
  op_size: 4096
seq8kread:
  iodepth:
    - 2
    - 4
    - 8
    - 12
    - 16
    - 24
    - 32
    - 64
    - 96
    - 128
    - 192
  jobname: seqread
  mode: read
  numjobs:
    - 1
  op_size: 8192
seq8kwrite:
  iodepth:
    - 2
    - 4
    - 8
    - 12
    - 16
    - 24
    - 32
    - 64
    - 96
    - 128
    - 192
    - 256
  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}

```