Comparitive Performance Report for cbt-4thFeb-main-4k-8vol vs cbt-3rdFeb-alexls20-econ-4k-8vol vs cbt-6thFeb-alexls22-econ-4k-8vol

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Comparison summary for cbt-4thFeb-main-4k-8vol vs cbt-3rdFeb-alexls20-econ-4k-8vol vs cbt-6thFeb-alexls22-econ-4k-8vol

Sequential Read	cbt_4thFeb_main_	44bt 8&ollFeb_alexls20_	econ_4% <u>cl</u> 8anoge	cbt_6thFeb_alexls22	_econ4% <u>cl</u> 8anoge
$\overline{4K}$	68314@2.3ms	64493@2.5	-6%	65503@2.4	-4%
8K	40450@2.4ms	38690@3.3	-4%	39256@3.3	-3%
16K	22810@5.6ms	22156@5.8	-3%	22265@5.7	-2%
32K	18772@6.8ms	18303@7.0	-2%	18793@6.8	0%
64K	$1095@9.6\mathrm{ms}$	1079@9.7	-1%	1107@9.5	1%
256K	1536@15.0 ms	1544@14.9	1%	1568@14.7	2%
512K	$1566@29.5\mathrm{ms}$	1569@29.4	0%	1584@29.1	1%
1024K	1574@53.4ms	1576@58.6	0%	1591@58.0	1%

Sequential Write	cbt_4thFeb_main_	4lbt 8@dlFeb_alexls20	_econ4 <u>%_cl</u> &wodge	cbt_6thFeb_alexls22	_econ_4% <u>cl</u> 8anoge
4K	3074@52.0ms	5569@28.7	81%	4864@32.9	58%
8K	2707@47.4ms	5139@31.1	90%	4744@33.7	75%
16K	7408@17.3 ms	6848@18.7	-8%	6434@19.9	-13%
32K	9111@14.0 ms	9229@13.8	1%	8868@9.0	-3%
64K	245@12.8ms	258@20.3	5%	284@12.9	16%
256K	568@7.2 ms	485@4.2	-15%	419@45.0	-26%
512K	479@87.4ms	462@90.6	-4%	480@95.8	0%
1024K	495@84.3 ms	502@133.3	1%	487@102.9	-2%

Random Read	$cbt_4thFeb_main_$	_4d <u>bt8</u> &odFeb_alexls20_eco	on_4% <u>cl</u> &woge	$cbt_6thFeb_alexls22_$	_econ4% <u>cl</u> &woge
4K	81023@4.7ms	80353@4.8	-1%	80995@4.7	-0%
8K	52986@7.2ms	51630@7.4	-3%	51850@7.4	-2%
16K	31191@12.3 ms	31125@8.2	-0%	31522@8.1	1%
32K	28234@9.1ms	29143@8.8	3%	29188@7.7	3%
64K	1559@5.4ms	1574@6.7	1%	1608@6.5	3%
256K	1695@14.8ms	1699@19.7	0%	1706@19.7	1%
512K	1697@27.2ms	1696@27.3	-0%	1707@27.0	1%
1024K	1706@54.1ms	1710@54.0	0%	1714@49.0	0%

Random Write	cbt_4thFeb_main_	44bt 83odFeb_alexls20_	_econ4 <u>%_cl</u> &anoge	cbt_6thFeb_alexls22	_econ_4% <u>cl</u> 8evnoge
$\overline{ m 4K}$	2746@46.6ms	5740@11.1	109%	5649@11.3	106%
8K	2917@43.8ms	5689@22.5	95%	5724@22.3	96%
16K	5957@16.1ms	5349@14.9	-10%	5175@24.7	-13%
32K	3629@35.2ms	3405@28.2	-6%	3387@37.8	-7%
64K	191@32.9ms	189@44.2	-1%	182@46.1	-5%
256K	421@39.7ms	428@58.6	2%	363@34.6	-14%

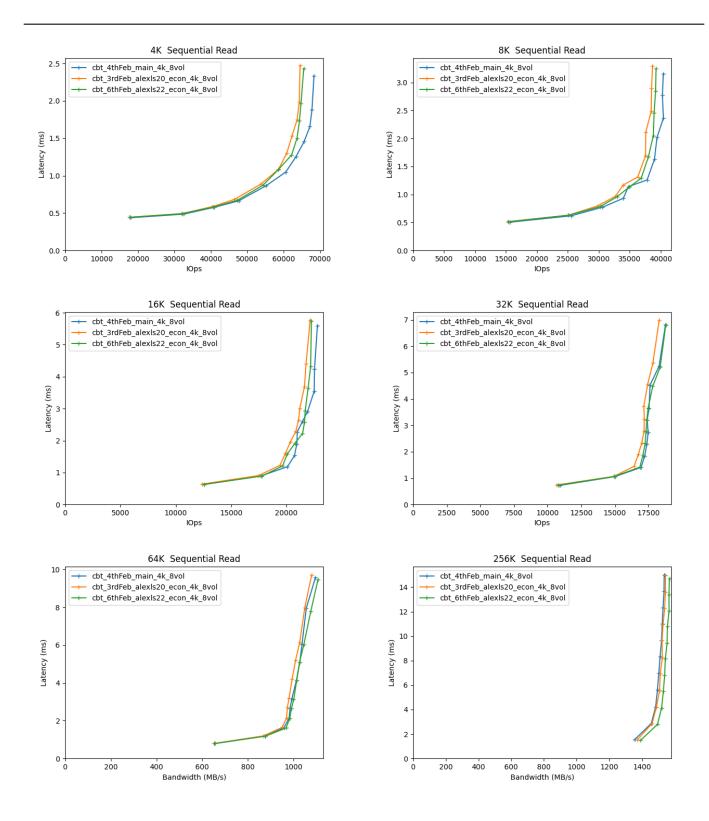
 $\label{lem:comparison} Comparison summary for cbt-4thFeb-main-4k-8vol vs cbt-3rdFeb-alexls 20-econ-4k-8vol vs cbt-6thFeb-alexls 22-econ-4k-8vol vs cbt-6thFeb-alexls 22-econ-4k-8vol vs cbt-6thFeb-alex 1822-econ-4k-8vol vs cbt-8thFeb-alex 1822-econ-4k-8thFeb-alex 1822-econ-4k-8thFeb-alex 1822-econ-4k-8thFeb-alex 1822-econ-4k-8thFeb-alex 1822-$

Random Write	$cbt_4thFeb_main_$	44bt 8&odFeb_alexls20_	_econ4 <u>%_cl</u> &wooge	cbt_6thFeb_alexls22	_econ_4% <u>cl</u> 8evnoge
512K 1024K	472@61.9ms 478@52.1ms	$478@87.6 \\ 506@82.4$	1% 6%	$467@89.7 \\ 489@171.5$	-1% 2%

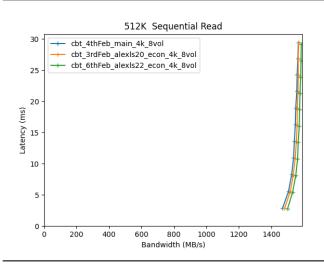
Random Read/Write	cbt_4thFeb_main_	44bt 83odlFeb_alexls20_	_econ4 <u>%_cl</u> &anoge	cbt_6thFeb_alexls22_	_econ4% <u>cl</u> &vooge
16K_70/30	7501@8.5ms	7401@5.4	-1%	7205@8.9	-4%
$64K_{30}/70$	277@13.2ms	245@23.5	-12%	257@22.4	-7%
$64 \text{K}_{2}70/30$	289@18.1ms	285@11.0	-1%	282@11.2	-2%

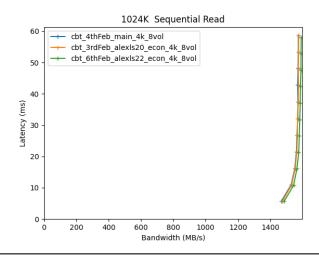
Response Curves

Sequential Read

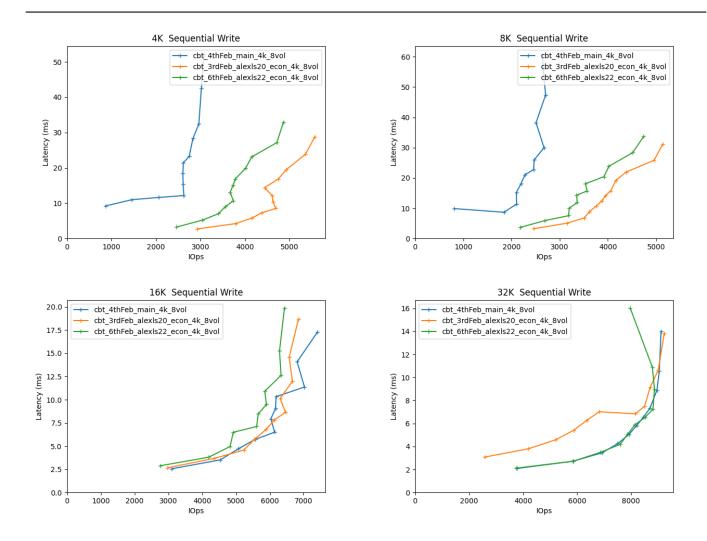


Response Curves Sequential Write

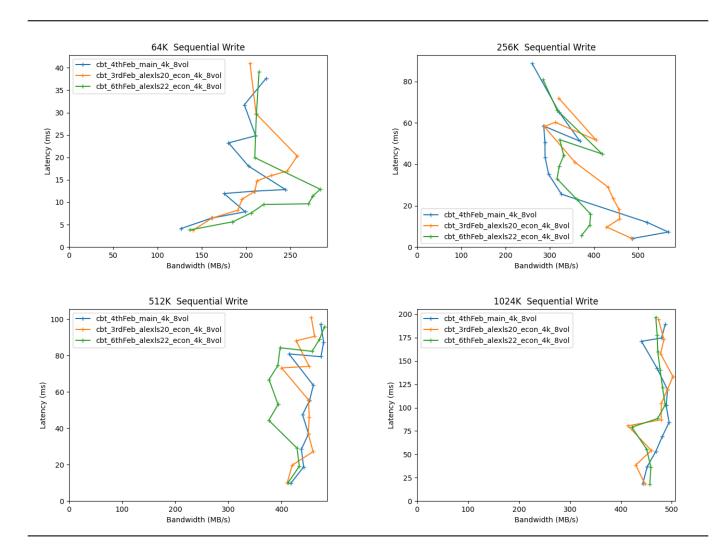




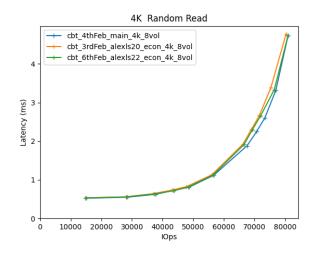
Sequential Write

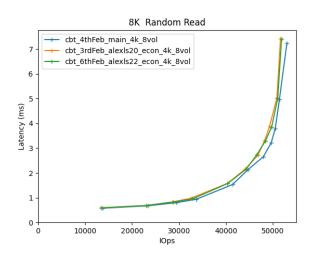


Response Curves Random Read

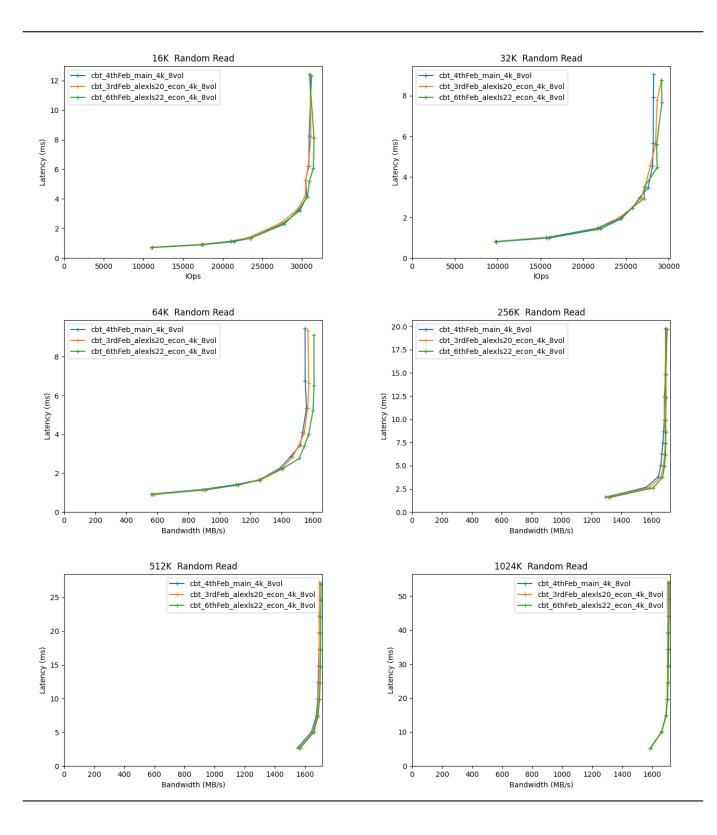


Random Read



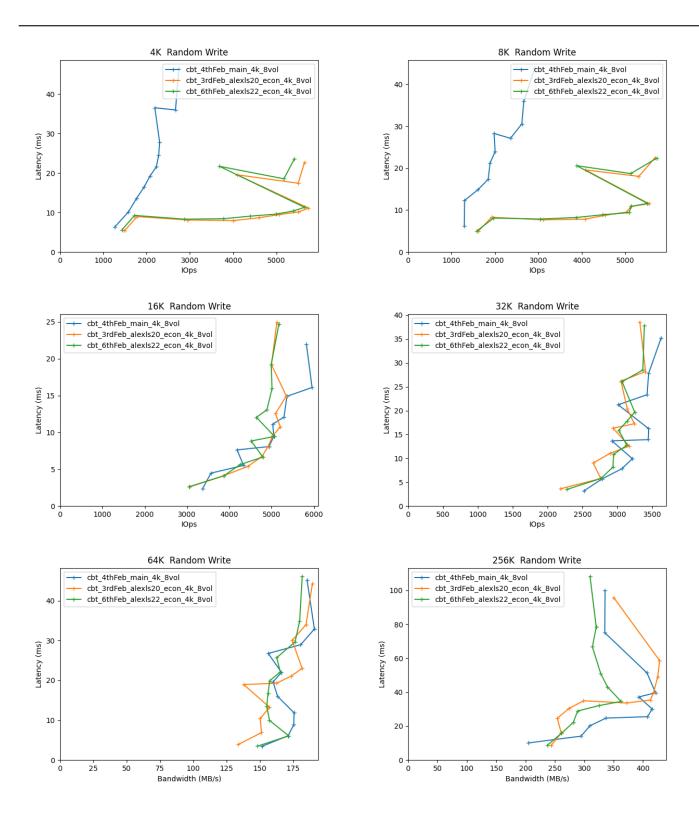


Response Curves Random Write

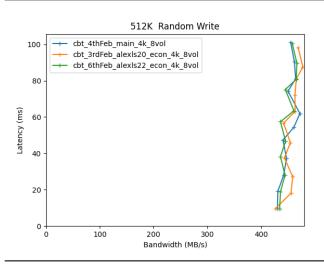


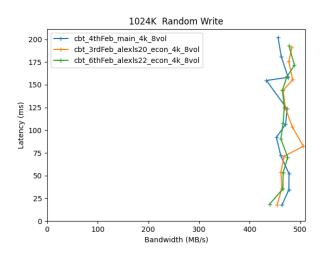
Random Write

Response Curves Random Write

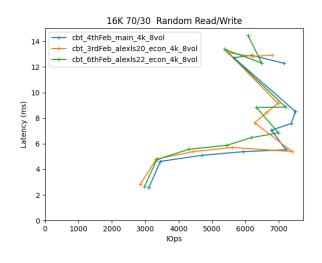


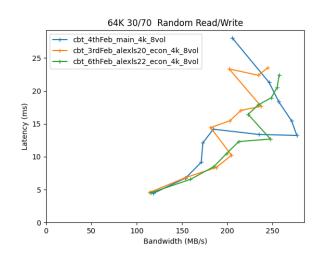
Response Curves Random Read/Write

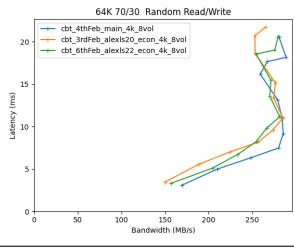




Random Read/Write







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
 precond_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:
  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
32 krandom write:
  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
512 krandomread:
  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
64 krandomread:
 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:
  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
 precond: 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
{\tt 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
{\tt 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
  - --- server1 ---
  osds_per_node: 6
  pdsh_ssh_args: -a -x -1%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 {collect1_dir}
  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
    precond_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
{\tt 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
{\tt 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
{\tt 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
 precond: true
seq16kread:
  iodepth:
```

```
- 1
  - 2
  - 3
  - 4
  - 5
  - 6
  - 7
  - 8
  - 10
  - 12
  - 16
  jobname: seqread
  mode: read
  numjobs:
  - 1
  op_size: 16384
seq16kwrite:
  {\tt 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}
```