Comparitive Performance Report for cbt-10thMar-4k-main-8vol-cacheon-rbdoff-isal vs cbt-14thMar-4k-erasurechunks-8vol-cacheon-rbdoff-isal

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# Comparison summary for cbt-10thMar-4k-main-8vol-cacheon-rbdoff-isal vs cbt-14thMar-4k-erasurechunks-8vol-cacheon-rbdoff-isal

Sequential Read	cbt_10thMar_4k_main	n <u>cl8tvoll.4thAlliæon4lrbehrafsuisa</u>	dhankse_Shrolughplucton_	rbd <b>#fchisa</b> ge latency
4K	66785 IOps@2.9ms	65906 IOps@2.9ms	-1%	0%
8K	39845  IOps@4.8ms	39808  IOps@4.8ms	-0%	0%
16K	22239  IOps@8.6ms	21981  IOps@8.7ms	-1%	1%
32K	18891  IOps@10.2ms	$19221 \; \mathrm{IOps@} 10.0 \mathrm{ms}$	2%	-2%
64K	1158  MB/s@14.5 ms	1166  MB/s@14.4ms	1%	-1%
256K	1553  MB/s@10.8 ms	1569  MB/s@10.7ms	1%	-1%
512K	1557  MB/s@10.8ms	1567  MB/s@10.7ms	1%	-1%
1024K	1564  MB/s@13.4ms	1574  MB/s@13.3 ms	1%	-1%

Sequential Write	cbt_10thMar_4k_mair	n <u>cl&amp;woll4th&amp;Meon4kbdoafsui</u>	Monthanige Shordughphoton_r	bd <b>#fchisa</b> ge latency
4K	3433 IOps@149.7ms	2897 IOps@177.2ms	-16%	18%
8K	$2008~\mathrm{IOps}@512.0\mathrm{ms}$	1654  IOps@787.1ms	-18%	54%
16K	5099  IOps@100.3ms	$4818 \; \mathrm{IOps@106.2ms}$	-6%	6%
32K	9593  IOps@80.0ms	9859  IOps@77.8ms	3%	-3%
64K	215  MB/s@156.5 ms	220  MB/s@153.2 ms	2%	-2%
256K	400  MB/s@62.8 ms	383  MB/s@65.5 ms	-4%	4%
512K	292  MB/s@229.8 ms	289  MB/s@232.9 ms	-1%	1%
1024K	$469~\mathrm{MB/s@357.8ms}$	406 MB/s@413.8ms	-13%	16%

Random Read	$cbt\_10thMar\_4k\_mair$	n <u>cl&amp;woll4thAlleon4kbeloafsu</u> i	isodhank <u>se_</u> stvod <u>u</u> ghpluton_	_rbd $\delta t \underline{c} \underline{h} \underline{i} \underline{m} \underline{g} e \text{ latency}$
4K	69659 IOps@5.5ms	70387 IOps@5.5ms	1%	0%
8K	47136  IOps@8.1ms	47132  IOps@8.1ms	-0%	0%
16K	29788  IOps@12.9ms	29303  IOps@13.1ms	-2%	2%
32K	26545  IOps@9.6ms	26504  IOps@9.7ms	-0%	1%
64K	1502  MB/s@11.2ms	1523  MB/s@11.0 ms	1%	-2%
256K	1708  MB/s@19.6 ms	1718  MB/s@9.8 ms	1%	-50%
512K	1775  MB/s@14.2 ms	1780  MB/s@14.1ms	0%	-1%
1024K	$1771~\mathrm{MB/s@16.6ms}$	1777  MB/s@16.5 ms	0%	-1%

Random Write	cbt_10thMar_4k_main	n <u>cl&amp;woll4th&amp;Maon4krb</u> dodsui&d	hank <u>se Svodu</u> gaphoton_r	bd&fchisage latency
4K	2053 IOps@373.6ms	2111 IOps@365.8ms	3%	-2%
8K	1948  IOps@394.6ms	1781  IOps@430.4ms	-9%	9%
16K	4539  IOps@112.7ms	4498  IOps@113.8ms	-1%	1%
32K	4105  IOps@124.6ms	4052  IOps@126.4ms	-1%	1%
64K	194  MB/s@129.5 ms	195  MB/s@129.1ms	1%	-0%
256K	280  MB/s@239.7 ms	281  MB/s@238.7ms	0%	-0%

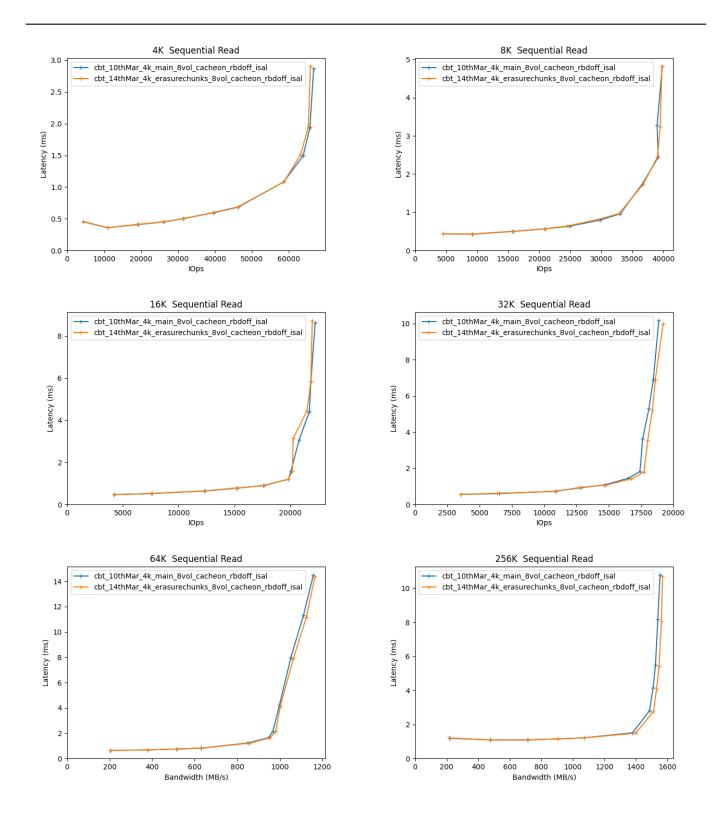
 $Comparison\ summary\ for\ cbt-10th Mar-4k-main-8vol-cacheon-rbdoff-is al\ vs\ cbt-14th Mar-4k-erasure chunks-8vol-cacheon-rbdoff-is al\ vs\ cbt-14th Mar-4k-erasure chunks-8vol-cacheon-$ 

Random Write	cbt_10thMar_4k_main	n <u>cl&amp;tvoll4th&amp;Mæon4krb</u> dodfsui	<b>Fordhardge_Shvodugaploc</b> on_r	rbd <b>%fchisn</b> ge latency
512K	262  MB/s@127.8 ms $313  MB/s@160.2 ms$	281 MB/s@119.0ms	7%	-7%
1024K		293 MB/s@171.0ms	-6%	7%

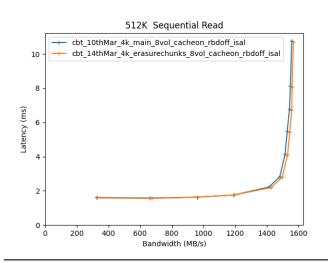
Random Read/Write	$cbt\_10thMar\_4k\_main$	<u>cl&amp;woll4thMleon4kbdoffsuisa</u>	odhankse Swodugaphoton_	rbd <b>%fchisa</b> ge latency
4K_70/30	5027  IOps@50.9ms	$4533 \; \mathrm{IOps}@56.4\mathrm{ms}$	-10%	11%
$16K_{20}/30$	4293  IOps@59.6ms	4429  IOps@57.9 ms	3%	-3%
$64K_30/70$	168  MB/s@99.8 ms	183  MB/s@91.8 ms	9%	-8%
$64K_{20}/30$	$202~\mathrm{MB/s@83.1ms}$	199  MB/s@84.5 ms	-1%	2%

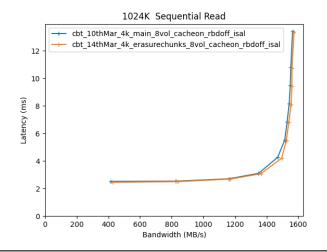
# Response Curves

## Sequential Read

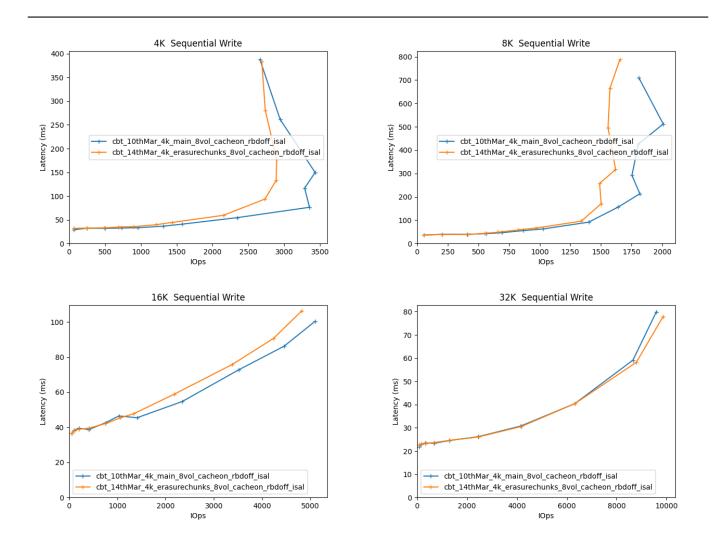


Response Curves Sequential Write

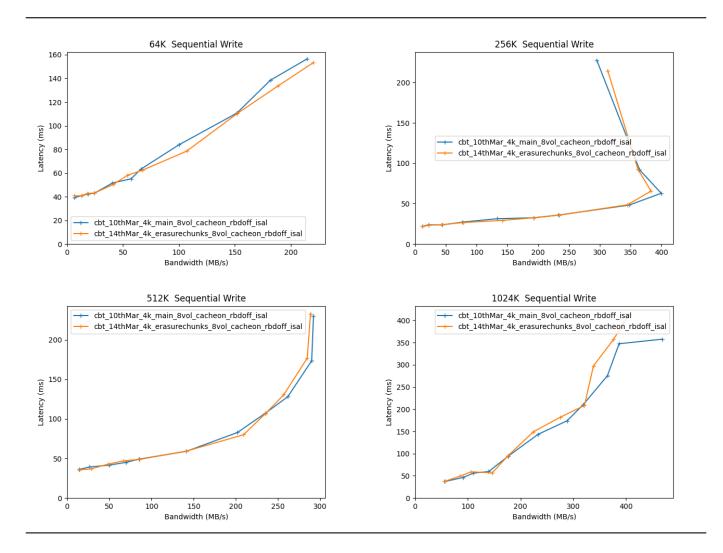




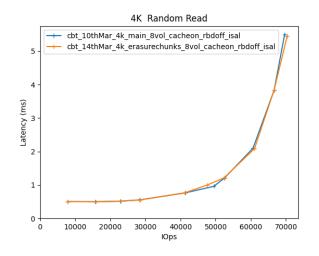
## Sequential Write

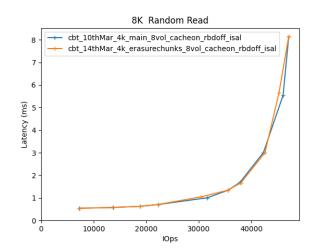


Response Curves Random Read

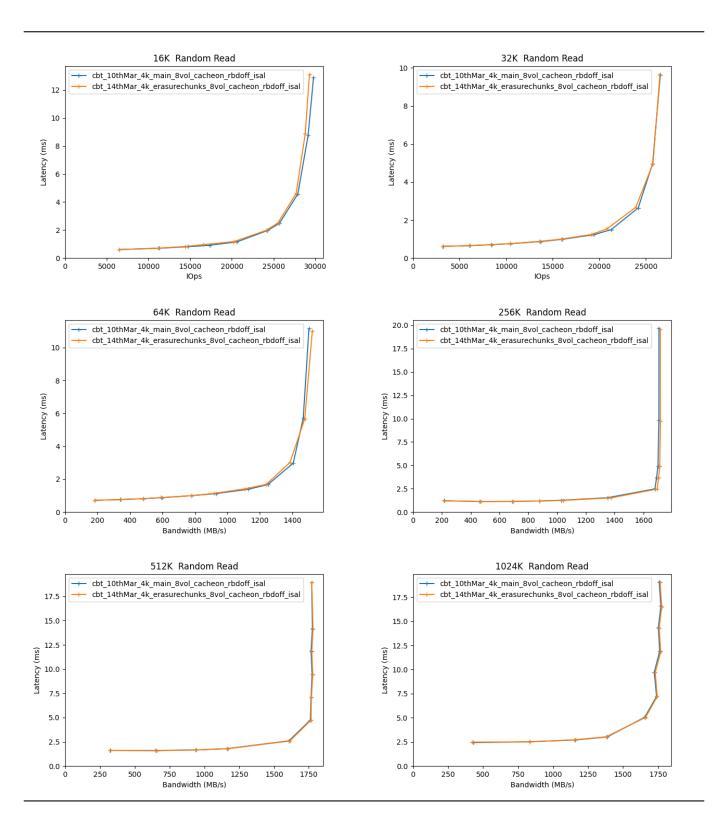


### Random Read



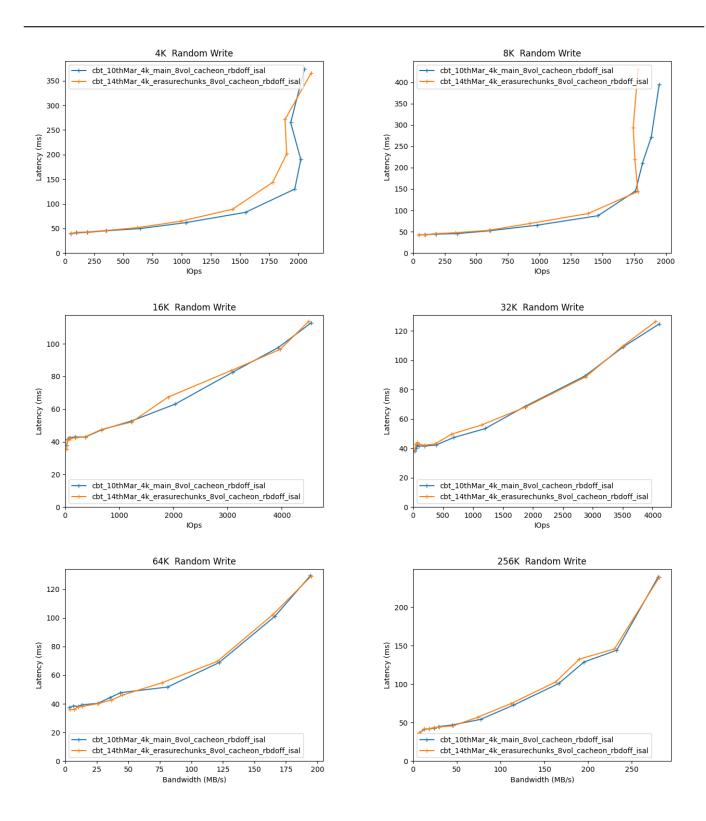


Response Curves Random Write

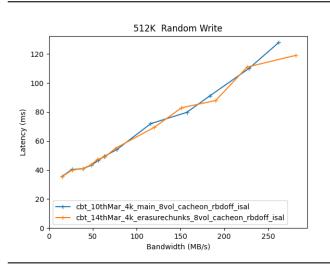


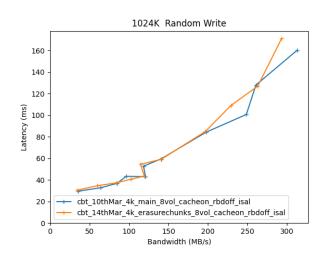
### Random Write

Response Curves Random Write

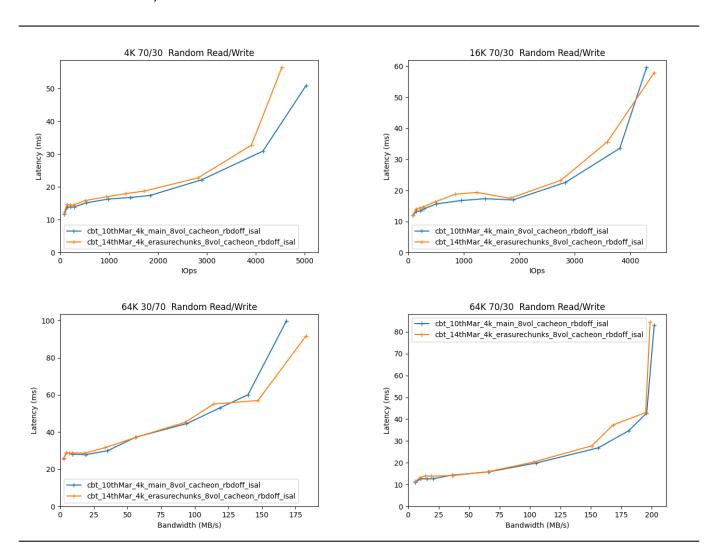


Response Curves Random Read/Write





## 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
 prefill:
    blocksize: 64k
    numjobs: 1
  procs_per_volume:
  - 1
  ramp: 30
  time: 90
  time_based: true
  use_existing_volumes: true
  vol_size: 52500
  volumes_per_client:
  workloads:
    16k7030:
      jobname: randmix
      mode: randrw
      numjobs:
      - 1
      op_size: 16384
      rwmixread: 70
      total_iodepth:
      - 1
      - 2
      - 3
      - 4
      - 8
      - 16
      - 24
      - 32
      - 64
      - 128
      - 256
    16krandomread:
      jobname: randread
      mode: randread
      numjobs:
      - 1
      op_size: 16384
      total_iodepth:
      - 4
      - 8
      - 12
      - 16
      - 24
      - 48
      - 64
      - 128
      - 256
      - 384
    16krandomwrite:
```

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

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

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

```
total_iodepth:
  - 4
  - 8
  - 12
  - 16
  - 32
  - 48
  - 64
  - 128
  - 256
  - 384
4krandomwrite:
  jobname: randwrite
 mode: randwrite
 numjobs:
  - 1
  op_size: 4096
  total_iodepth:
  - 2
  - 4
  - 8
  - 16
  - 32
  - 64
  - 128
  - 256
  - 384
  - 512
  - 768
512krandomread:
  jobname: randread
  mode: randread
 numjobs:
  - 1
  op_size: 524288
  total_iodepth:
  - 1
  - 2
  - 3
  - 4
  - 8
  - 16
  - 24
  - 32
  - 40
  - 48
  - 64
512krandomwrite:
  jobname: randwrite
 mode: randwrite
 numjobs:
  - 1
 op_size: 524288
  total_iodepth:
  - 1
  - 2
  - 3
  - 4
  - 5
  - 6
  - 8
  - 16
  - 24
```

- 32 - 48 - 64 512kseqread: jobname: seqread mode: read numjobs: - 1 op\_size: 524288 total\_iodepth: - 1 - 2 - 3 - 4 - 6 - 8 - 12 - 16 - 20 - 24 - 32 512kseqwrite: jobname: seqwrite mode: write numjobs: - 1 op\_size: 524288 total\_iodepth: - 1 - 2 - 4 - 6 - 8 - 16 - 32 - 48 - 64 - 96 - 128 64k3070: jobname: randmix mode: randrw numjobs: - 1 op\_size: 65536 rwmixread: 30 total\_iodepth: - 1 - 2 - 3 - 4 - 8 - 16 - 32 - 64 - 96 - 128 - 256 64k7030: jobname: randmix mode: randrw numjobs:

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

- 32 - 64 - 128 - 192 - 256 64kseqwrite: jobname: write mode: write numjobs: - 1 op\_size: 65536 total\_iodepth: - 4 - 8 - 12 - 16 - 32 - 48 - 64 - 128 - 256 - 384 - 512 8krandomread: jobname: randread mode: randread numjobs: - 1 op\_size: 8192 total\_iodepth: - 4 - 8 - 12 - 16 - 32 - 48 - 64 - 128 - 256 - 384 8krandomwrite: jobname: randwrite mode: randwrite numjobs: - 1 op\_size: 8192 total\_iodepth: - 2 - 4 - 8 - 16 - 32 - 64 - 128 - 256 - 384 - 512 - 768 precondition: jobname: precond1rw mode: randwrite monitor: false numjobs:

```
- 1
  op_size: 65536
 time: 600
 total_iodepth:
  - 16
seq16kread:
  jobname: seqread
 mode: read
 numjobs:
  - 1
 op_size: 16384
  total_iodepth:
  - 2
  - 4
  - 8
  - 12
  - 16
  - 24
  - 32
  - 64
 - 96
  - 128
  - 192
seq16kwrite:
  jobname: seqwrite
 mode: write
 numjobs:
  - 1
  op_size: 16384
  total_iodepth:
  - 2
 - 4
  - 8
  - 16
  - 32
  - 48
 - 64
 - 128
 - 256
  - 384
  - 512
{\tt seq256kread:}
  jobname: seqread
 mode: read
 numjobs:
  - 1
  op_size: 262144
  total_iodepth:
  - 1
  - 2
  - 3
  - 4
  - 5
  - 8
  - 16
  - 24
  - 32
  - 48
  - 64
seq256kwrite:
  jobname: seqwrite
 mode: write
 numjobs:
```

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

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

```
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 -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 {collectl_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
    prefill:
      blocksize: 64k
      numjobs: 1
    procs_per_volume:
    - 1
    ramp: 30
    time: 90
    time_based: true
    use_existing_volumes: true
    vol_size: 52500
    volumes_per_client:
    - 8
    workloads:
      16k7030:
        jobname: randmix
        mode: randrw
        numjobs:
```

```
- 1
 op_size: 16384
 rwmixread: 70
 total_iodepth:
  - 1
  - 2
  - 3
 - 4
 - 8
 - 16
 - 24
 - 32
 - 64
 - 128
 - 256
16krandomread:
 jobname: randread
 mode: randread
 numjobs:
 - 1
 op_size: 16384
 total_iodepth:
 - 4
 - 8
 - 12
 - 16
 - 24
 - 48
 - 64
 - 128
 - 256
  - 384
16krandomwrite:
  jobname: randwrite
 mode: randwrite
 numjobs:
 - 1
 op_size: 16384
 total_iodepth:
  - 1
  - 2
  - 3
  - 4
 - 8
 - 16
 - 32
 - 64
 - 128
 - 256
 - 384
 - 512
1Mrandomread:
  jobname: randread
 mode: randread
 numjobs:
  - 1
 op_size: 1048576
 total_iodepth:
  - 1
 - 2
 - 3
 - 4
 - 8
```

- 12 - 16 - 20 - 24 - 28 - 32 1Mrandomwrite: jobname: randwrite mode: randwrite numjobs: - 1 op\_size: 1048576 total\_iodepth: - 1 - 2 - 3 - 4 - 5 - 6 - 8 - 16 - 24 - 32 - 48 1Mseqread: jobname: seqread mode: read numjobs: - 1 op\_size: 1048576 total\_iodepth: - 1 - 2 - 3 - 4 - 6 - 8 - 10 - 12 - 14 - 16 - 20 1Mseqwrite: jobname: seqwrite mode: write numjobs: - 1 op\_size: 1048576 total\_iodepth: - 2 - 4 - 6 - 8 - 16 - 32 - 48 - 64 - 96 - 128 - 160 256krandomread: jobname: randread

mode: randread

```
numjobs:
  - 1
  op_size: 262144
  total_iodepth:
  - 1
  - 2
  - 3
  - 4
  - 5
  - 8
  - 16
  - 24
  - 32
  - 64
  - 128
256krandomwrite:
  jobname: randwrite
  mode: randwrite
  numjobs:
  - 1
  op_size: 262144
  total_iodepth:
  - 1
  - 2
  - 3
  - 4
  - 5
  - 8
  - 16
  - 32
  - 64
  - 96
  - 128
  - 256
32krandomread:
  jobname: randread
  mode: randread
  numjobs:
  - 1
  op_size: 32768
  {\tt total\_iodepth:}
  - 2
  - 4
  - 6
  - 8
  - 12
  - 16
  - 24
  - 32
  - 64
  - 128
  - 256
32krandomwrite:
  jobname: randwrite
  mode: randwrite
  numjobs:
  - 1
  op_size: 32768
  total_iodepth:
  - 1
  - 2
  - 3
  - 4
```

```
- 8
  - 16
  - 32
  - 64
  - 128
  - 256
  - 384
  - 512
4k7030:
  jobname: randmix
 mode: randrw
 numjobs:
  - 1
  op_size: 4096
 rwmixread: 70
  total_iodepth:
  - 1
  - 2
  - 3
  - 4
  - 8
  - 16
  - 24
  - 32
  - 64
  - 128
  - 256
4krandomread:
  jobname: randread
 mode: randread
 numjobs:
  - 1
  op_size: 4096
  total_iodepth:
  - 4
  - 8
  - 12
  - 16
  - 32
  - 48
  - 64
  - 128
  - 256
  - 384
4krandomwrite:
  jobname: randwrite
 mode: randwrite
 numjobs:
  - 1
  op_size: 4096
  total_iodepth:
  - 2
  - 4
  - 8
  - 16
  - 32
  - 64
  - 128
  - 256
  - 384
  - 512
  - 768
```

512krandomread:

```
jobname: randread
 mode: randread
 numjobs:
  - 1
  op_size: 524288
  total_iodepth:
  - 1
  - 2
  - 3
  - 4
  - 8
  - 16
  - 24
  - 32
 - 40
  - 48
  - 64
512krandomwrite:
  jobname: randwrite
 mode: randwrite
 numjobs:
  - 1
 op_size: 524288
  total_iodepth:
  - 1
  - 2
  - 3
  - 4
  - 5
  - 6
  - 8
  - 16
  - 24
  - 32
  - 48
  - 64
512kseqread:
  jobname: seqread
 mode: read
 numjobs:
  - 1
 op_size: 524288
  total_iodepth:
  - 1
  - 2
  - 3
  - 4
  - 6
  - 8
  - 12
  - 16
 - 20
 - 24
  - 32
512kseqwrite:
  jobname: seqwrite
 mode: write
 numjobs:
  - 1
 op_size: 524288
 total_iodepth:
 - 1
  - 2
```

```
- 4
  - 6
  - 8
  - 16
  - 32
  - 48
  - 64
 - 96
  - 128
64k3070:
  jobname: randmix
 mode: randrw
 numjobs:
  - 1
  op_size: 65536
 rwmixread: 30
  total_iodepth:
  - 1
  - 2
  - 3
  - 4
  - 8
  - 16
  - 32
  - 64
  - 96
  - 128
  - 256
64k7030:
  jobname: randmix
 mode: randrw
 numjobs:
  - 1
 op_size: 65536
 rwmixread: 70
 total_iodepth:
  - 1
  - 2
  - 3
  - 4
  - 8
  - 16
  - 32
  - 64
  - 96
  - 128
  - 256
64krandomread:
  jobname: randread
 mode: randread
 numjobs:
  - 1
 op_size: 65536
  total_iodepth:
  - 2
  - 4
  - 6
  - 8
  - 12
  - 16
  - 24
  - 32
```

- 128 - 256 64krandomwrite: jobname: randwrite mode: randwrite numjobs: - 1 op\_size: 65536 total\_iodepth: - 4 - 6 - 8 - 16 - 24 - 32 - 64 - 128 - 256 - 384 64kseqread: jobname: read mode: read numjobs: - 1 op\_size: 65536 total\_iodepth: - 2 - 4 - 6 - 8 - 16 - 24 - 32 - 64 - 128 - 192 - 256 64kseqwrite: jobname: write mode: write numjobs: - 1 op\_size: 65536 total\_iodepth: - 4 - 8 - 12 - 16 - 32 - 48 - 64 - 128 - 256 - 384 - 512 8krandomread: jobname: randread mode: randread numjobs: - 1 op\_size: 8192 total\_iodepth:

```
- 4
  - 8
  - 12
  - 16
  - 32
  - 48
  - 64
 - 128
  - 256
  - 384
{\tt 8krandomwrite:}
  jobname: randwrite
 mode: randwrite
 numjobs:
  - 1
  op_size: 8192
  total_iodepth:
  - 2
  - 4
  - 8
  - 16
  - 32
 - 64
  - 128
  - 256
  - 384
  - 512
  - 768
precondition:
  jobname: precond1rw
 mode: randwrite
  monitor: false
 numjobs:
  - 1
 op_size: 65536
 time: 600
 total_iodepth:
  - 16
seq16kread:
  jobname: seqread
 mode: read
 numjobs:
  - 1
  op_size: 16384
  total_iodepth:
  - 2
  - 4
  - 8
  - 12
  - 16
  - 24
  - 32
 - 64
 - 96
  - 128
  - 192
seq16kwrite:
  jobname: seqwrite
 mode: write
 numjobs:
  - 1
  op_size: 16384
  total_iodepth:
```

- 2 - 4 - 8 - 16 - 32 - 48 - 64 - 128 - 256 - 384 - 512 seq256kread: jobname: seqread mode: read numjobs: - 1 op\_size: 262144 total\_iodepth: - 1 - 2 - 3 - 4 - 5 - 8 - 16 - 24 - 32 - 48 - 64 seq256kwrite: jobname: seqwrite mode: write numjobs: - 1 op\_size: 262144 total\_iodepth: - 1 - 2 - 4 - 8 - 16 - 24 - 32 - 64 - 96 - 128 - 256 seq32kread: jobname: seqread mode: read numjobs: - 1 op\_size: 32768 total\_iodepth: - 2 - 4 - 8 - 12 - 16 - 24 - 32 - 64

```
- 128
  - 192
seq32kwrite:
  jobname: seqwrite
 mode: write
 numjobs:
  - 1
  op_size: 32768
  total_iodepth:
  - 4
  - 8
  - 16
  - 32
 - 64
  - 128
  - 256
  - 512
  - 768
seq4kread:
  jobname: seqread
 mode: read
 numjobs:
  - 1
  op_size: 4096
  total_iodepth:
  - 2
  - 4
  - 8
  - 12
  - 16
  - 24
  - 32
  - 64
 - 96
  - 128
  - 192
seq4kwrite:
  jobname: seqwrite
 mode: write
 numjobs:
  - 1
 op_size: 4096
  total_iodepth:
  - 2
  - 8
  - 16
  - 24
  - 32
  - 48
 - 64
 - 128
 - 256
 - 384
 - 512
  - 768
  - 1024
seq8kread:
  jobname: seqread
 mode: read
 numjobs:
  - 1
  op_size: 8192
```

```
total_iodepth:
        - 8
        - 12
        - 16
        - 24
        - 32
        - 64
        - 96
        - 128
        - 192
      seq8kwrite:
        jobname: seqwrite
        mode: write
        numjobs:
        - 1
        op_size: 8192
        total_iodepth:
        - 2
        - 8
        - 16
        - 24
        - 32
        - 48
        - 64
        - 128
        - 256
        - 384
        - 512
        - 768
        - 1024
        - 1280
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 -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 {collectl_dir}
```