# Performance Report for 10-09-2025-cbt-osd-down-jerasure-ec-off

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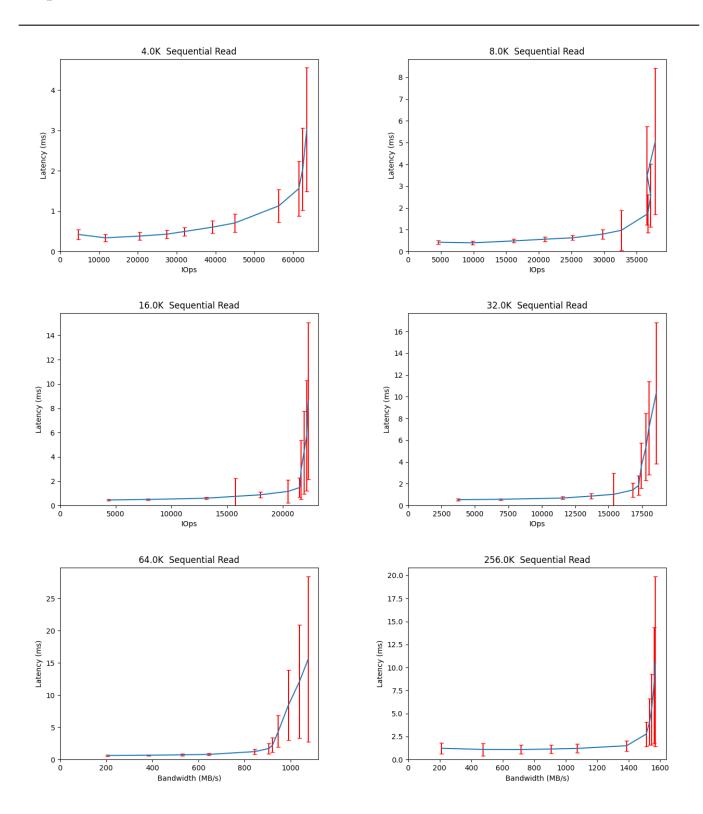
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# Summary of results for 10-09-2025-cbt-osd-down-jerasure-ec-off

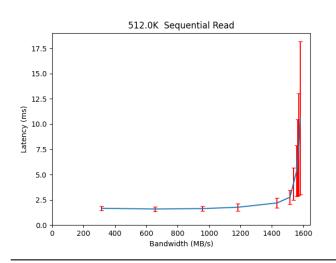
Workload Name	Maximum Throughput	Latency (ms)
4096_read	63495 IOps	3.0
8192_read	37848  IOps	5.1
16384_read	22299  IOps	8.6
32768_read	18560  IOps	10.3
65536_read	1076  MB/s	15.6
262144_read	1572  MB/s	10.7
524288_read	1581  MB/s	10.6
1048576_read	1589  MB/s	13.2
4096_write	18086  IOps	56.6
8192_write	20093  IOps	63.7
16384_write	9698  IOps	52.8
32768_write	12589  IOps	61.0
65536_write	248  MB/s	135.4
262144_write	604  MB/s	111.0
524288_write	308  MB/s	217.7
1048576_write	356  MB/s	472.4
4096_randread	64252  IOps	6.0
8192_randread	42708  IOps	6.0
16384_randread	30732  IOps	8.3
32768_randread	27550  IOps	9.3
65536_randread	1392  MB/s	6.0
262144_randread	1654  MB/s	10.1
524288_randread	1792  MB/s	9.3
$1048576$ _randread	1791  MB/s	16.4
4096_randwrite	3912  IOps	131.6
8192_randwrite	3321  IOps	154.1
16384_randwrite	6084  IOps	84.1
32768_randwrite	4705  IOps	108.7
65536_randwrite	236  MB/s	106.6
262144_randwrite	335  MB/s	200.2
524288_randwrite	$299 \mathrm{~MB/s}$	111.8
1048576_randwrite	325  MB/s	154.6
4096_70_30_randrw	8665  IOps	29.5
16384_70_30_randrw	6198  IOps	41.3
65536_70_30_randrw	192  MB/s	87.4
65536_30_70_randrw	$216 \mathrm{~MB/s}$	77.7

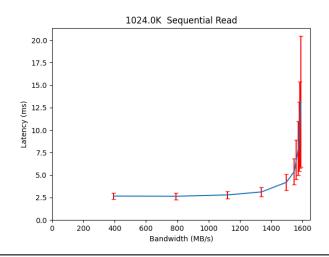
## Response Curves

#### Sequential Read

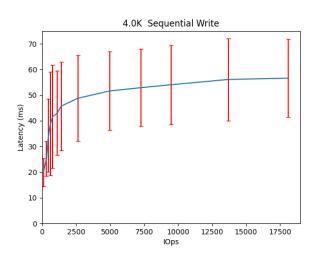


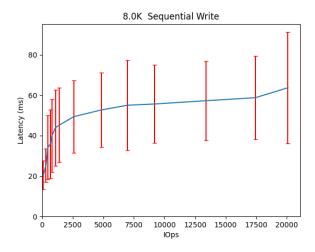
Response Curves Sequential Write

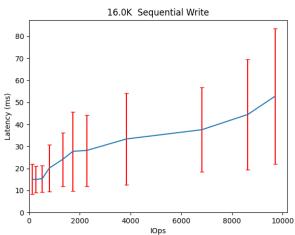


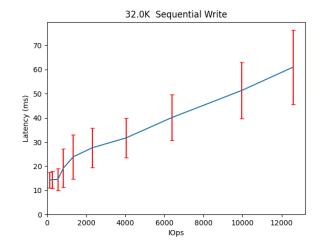


#### Sequential Write

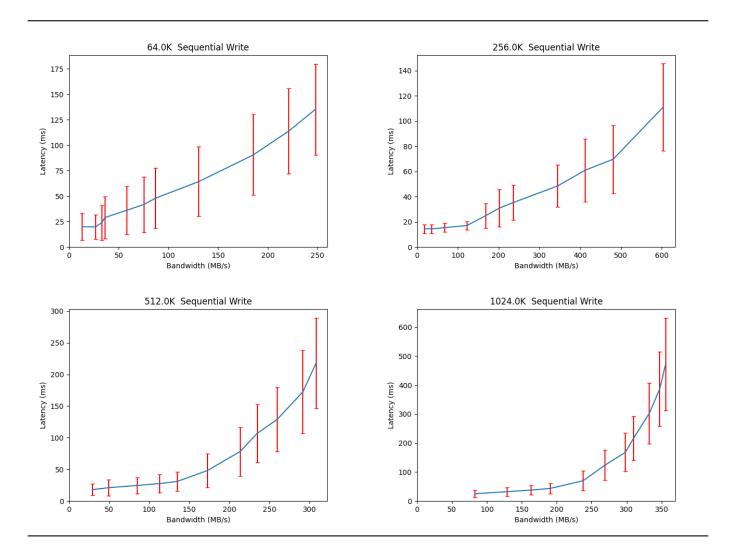




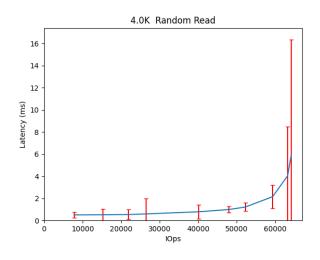


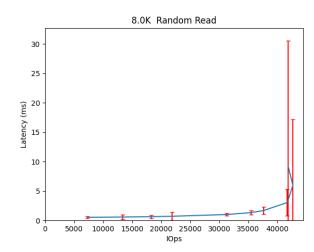


Response Curves Random Read

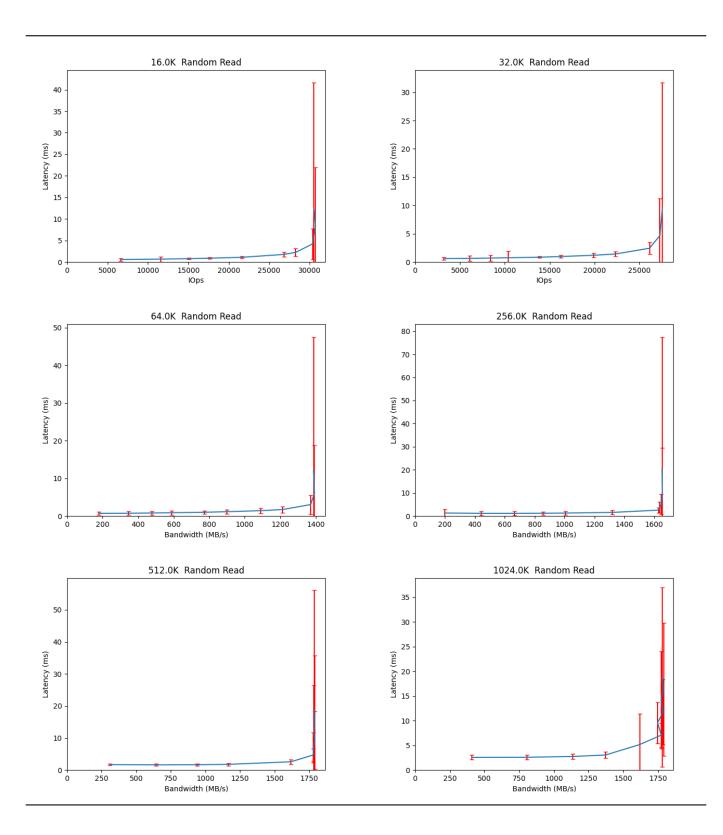


#### Random Read



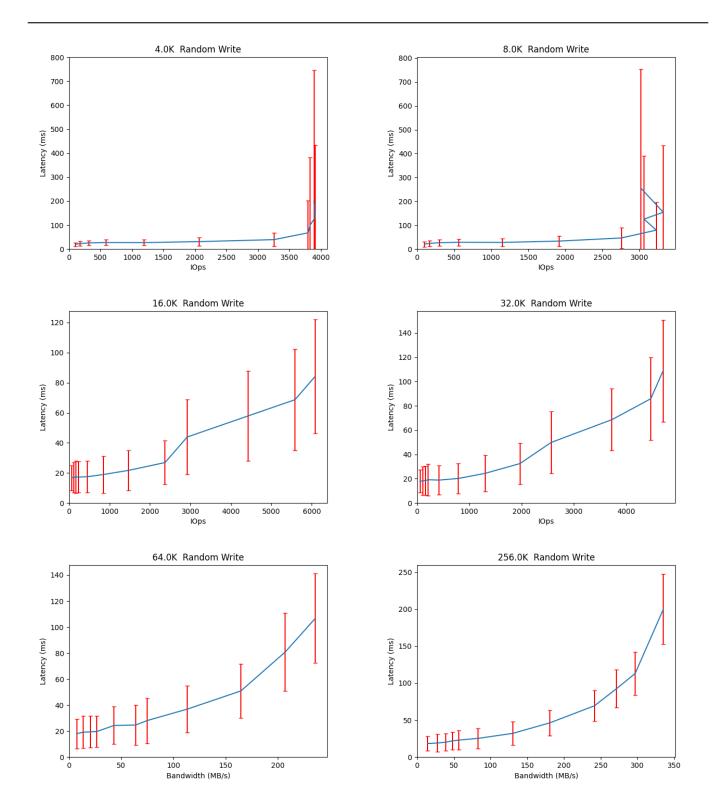


Response Curves Random Write

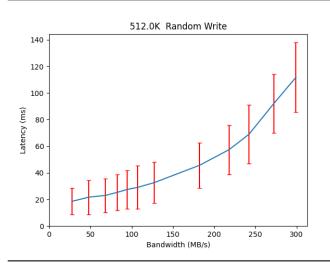


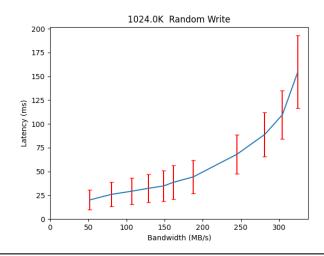
#### Random Write

Response Curves Random Write

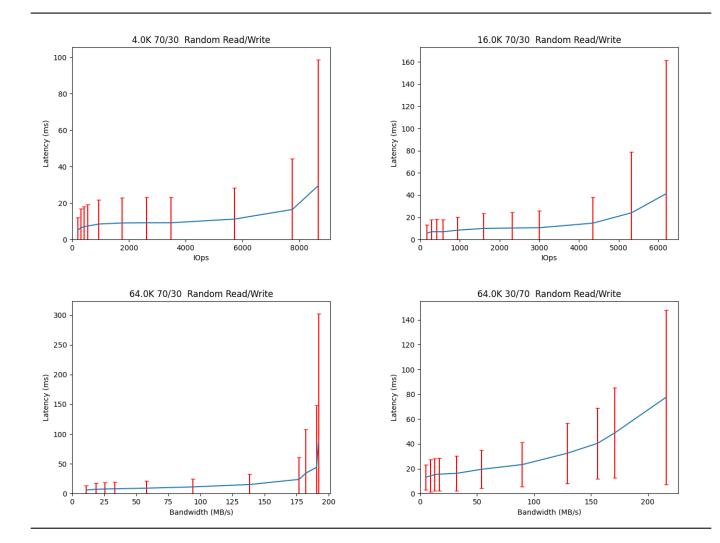


Response Curves Random Read/Write





#### Random Read/Write



### Configuration yaml

```
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
  rbdname: cbt-librbdfio
  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 total\_iodepth: - 2 - 4 - 6 - 8 - 12 - 16 - 24 - 32 - 64 - 128 - 256  ${\tt 32krandomwrite:}\\$ 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
  - 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:
  - 8
  - 12
  - 16
  - 32
  - 48
  - 64
  - 128
  - 256
  - 384
  - 512
8krandomread:
  jobname: randread
 mode: randread
 numjobs:
  - 1
 op_size: 8192
  {\tt 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:
  - 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
{\tt seq32kread:}
  jobname: seqread
 mode: read
 numjobs:
  - 1
  op_size: 32768
  total_iodepth:
  - 2
  - 4
  - 8
  - 12
  - 16
  - 24
  - 32
  - 64
  - 96
  - 128
  - 192
seq32kwrite:
  jobname: seqwrite
 mode: write
 numjobs:
  - 1
 op_size: 32768
  total_iodepth:
  - 2
  - 4
  - 8
  - 16
  - 32
  - 64
  - 128
  - 256
  - 512
  - 768
seq4kread:
  jobname: seqread
 mode: read
```

```
numjobs:
  - 1
  op_size: 4096
  total_iodepth:
  - 2
  - 4
  - 8
  - 12
  - 16
  - 24
  - 32
  - 64
  - 96
  - 128
  - 192
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
        - 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 -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}
```