Comparitive Performance Report for 24th-Sep-Jerasure-4+2 vs 13th-Oct-Clay-4+2+5 vs 9th-Oct-Jerasure-4+2-OSD-down vs 10th-Oct-Clay-4+2+5-OSD-down

Table of contents

- $\bullet \ \ Comparison \ summary \ for \ 24th-Sep-Jerasure-4+2 \ vs \ 13th-Oct-Clay-4+2+5 \ vs \ 9th-Oct-Jerasure-4+2-OSD-down \ vs \ 10th-Oct-Clay-4+2+5-OSD-down$
- Response Curves
 - Sequential Read
 - Sequential Write
 - Random Read
 - Random Write
 - Random Read/Write
- Configuration yaml files
 - results

Comparison summary for 24th-Sep-Jerasure-4+2 vs 13th-Oct-Clay-4+2+5 vs 9th-Oct-Jerasure-4+2-OSD-down vs 10th-Oct-Clay-4+2+5-OSD-down

Sequential Read	24th_Sep_Jer	a sthe_ Øet2_Clay_	_ 4⁄dc2h4.5 ge	9th_Oct_Jerası	ır& <u>ch</u> angeOS	SD0tHovOrct_Clay	√_¥⁄de Llab geOSD_	dow
4K	88535@4.3ms	87877@4.4	-1%	86279@4.4	-3%	77823@4.9	-12%	
8K	72622@5.3ms	72298@4.0	-0%	71977@5.3	-1%	64407@6.0	-11%	
16K	54724@5.3ms	55032@5.2	1%	54546@5.3	-0%	50059@5.7	-9%	
32K	51917@3.7ms	51589@3.7	-1%	49597@3.9	-4%	43847@4.4	-16%	
64K	2759@1.5ms	3089@5.4	12%	2757@3.0	-0%	2198@3.8	-20%	
256K	7038@19.1ms	6994@19.2	-1%	6370@21.1	-9%	5293@25.4	-25%	
512K	7896@17.0 ms	7777@17.3	-2%	7061@19.0	-11%	5971@22.5	-24%	
1024K	$8396@32.0\mathrm{ms}$	8291@32.4	-1%	7528@35.7	-10%	6579@40.8	-22%	

Sequential Write	24th_Sep_Jera sthe_@ et2_Cl	ay_ <i>Vdcha5</i> ge	9th_Oct_Jeras	sur& <u>cha</u> ngeOs	SID <u>0t</u> ldovOct_Clay	_ <i>4<mark>/c2\+5</mark>ge</i> OSD_	_dow
4K	152187@10.1msl41273@10.9	-7%	154904@9.9	2%	141456@10.9	-7%	
8K	$153668@10.0 \mathrm{m} \pm 32408@11.6$	-14%	159837@9.6	4%	135906@11.3	-12%	
16K	130283@7.8 ms 101082@10.1	-22%	138893@7.4	7%	106849@9.6	-18%	
32K	76706@10.0 ms 59256@12.9	-23%	81494@9.4	6%	62200@12.3	-19%	
64K	2817@11.9ms 2134@15.7	-24%	2818@8.9	0%	2265@14.8	-20%	
256K	3582@18.6ms $2854@23.4$	-20%	3714@17.9	4%	2964@22.5	-17%	
512K	3702@17.9 ms 2991@22.2	-19%	3805@17.4	3%	3131@21.2	-15%	
1024K	4435@37.3ms 3827@43.3	-14%	4634@35.7	4%	4006@41.4	-10%	

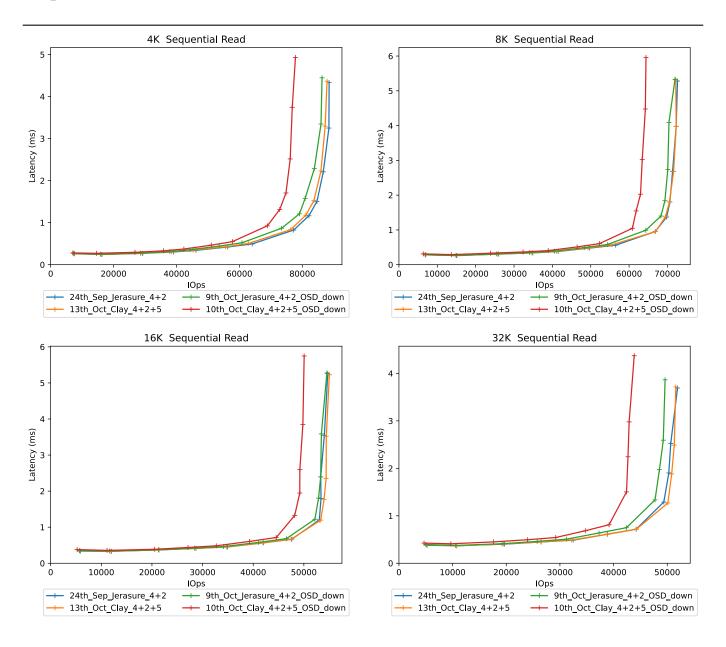
Random Read	24th_Sep_Jera	asathe_Oet2_Clay_	_ <i>V</i> d c2\an ge	9th_Oct_Jeras	sur‰chaugeO;	SID <u>0t</u> hlow0ct_Clay		_dow
4K	56868@13.5ms	57229@13.4	1%	56798@13.5	-0%	52005@14.8	-9%	
8K	57499@13.4ms	57551@13.3	0%	57036@13.5	-1%	54067@14.2	-6%	
16K	56952@10.3 ms	56699@10.4	-0%	56520@10.4	-1%	53659@11.0	-6%	
32K	52631@7.3 ms	52854@9.7	0%	50856@7.5	-3%	47593@10.8	-10%	
64K	3052@8.2ms	3095@5.4	1%	2909@8.6	-5%	2548@9.9	-17%	
256K	6523@5.1ms	6282@5.3	-4%	5741@5.8	-12%	5313@6.3	-19%	
512K	8035@33.4 ms	7829@34.3	-3%	7162@37.5	-11%	6562@40.9	-18%	
1024K	8358@32.1 ms	8288@32.4	-1%	7443@36.1	-11%	6848@39.2	-18%	

Random						
Write	24th_Sep_Jerasathe_Oct2_Clay	_ 4%245 ge	9th_Oct_Jerası	ır <u>%</u> ch#ıdgeO	SID <u>Ot</u> hlowOct_Clay	1/dc2\a5 geOSDc
4K	14536@8.8ms $14376@8.9$	-1%	14933@17.1	3%	14501@8.8	-0%
8K	$13394@19.1 ms \ 13252@58.0$	-1%	14418@53.3	8%	13427@57.2	0%
16K	$15582@24.6\mathrm{ms}\ 15984@32.0$	3%	17735@28.9	14%	17030@30.0	9%
32K	$16810@22.8\mathrm{ms}\ 15584@24.6$	-7%	17104@22.4	2%	16577@23.1	-1%
64K	1118@22.5 ms 1084@15.4	-3%	1115@15.0	-0%	1070@23.5	-4%
256K	3229@20.6ms $2736@24.4$	-15%	3188@20.9	-1%	2996@22.3	-7%
512K	3768@8.7ms $3275@10.0$	-13%	3788@8.6	1%	3433@9.5	-9%
1024K	4340@11.1ms 3644@13.3	-16%	4430@10.9	2%	3860@12.6	-11%

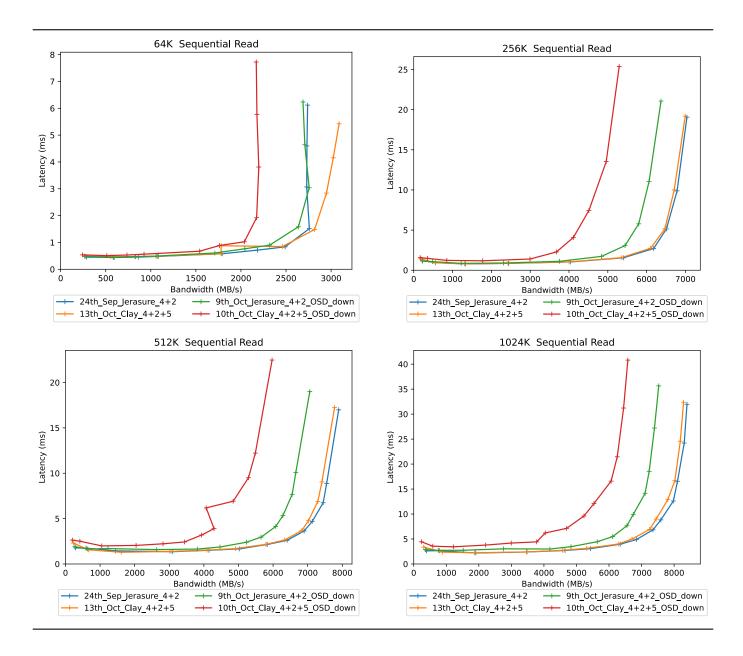
Random Read/Write	24th_Sep_Jer	astre Oct2 Clay	_ 4⁄4c2h&5 ge	9th_Oct_Jerasu	r <u>%chan</u> geOS	S D 0thovOct_Cla	y_ <i>¼</i> c L+5 geOSD_down
$4K_{-70/30}$	24534@10.4ms	23192@2.7	-5%	25977@14.8	6%	24728@15.5	1%
$16K_{-70/30}$	27036@9.5ms	25855@9.9	-4%	28007@9.1	4%	26630@4.8	-2%
$64K_{70}/30$	1615@10.4ms	1548@10.8	-4%	1688@5.0	5%	1538@4.1	-5%
$64 \text{K} _ 30/70$	1159@14.4ms	1237@13.5	7%	1291@13.0	11%	1161@14.4	0%

Response Curves

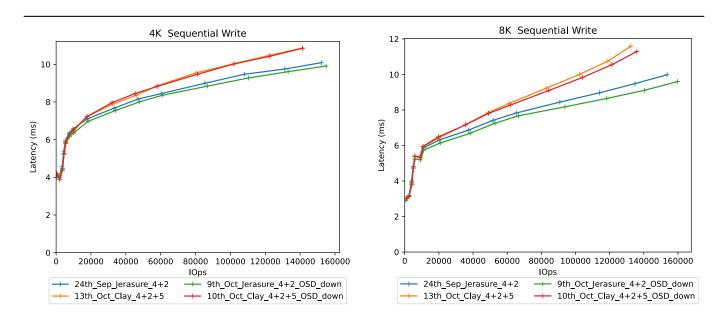
Sequential Read



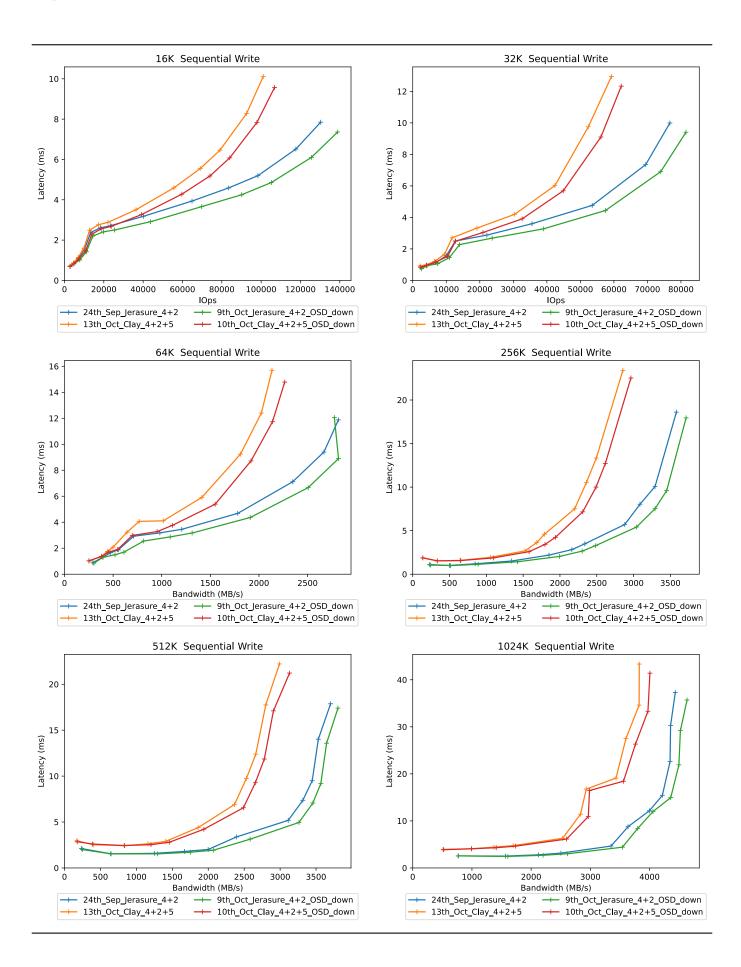
Response Curves Sequential Write



Sequential Write

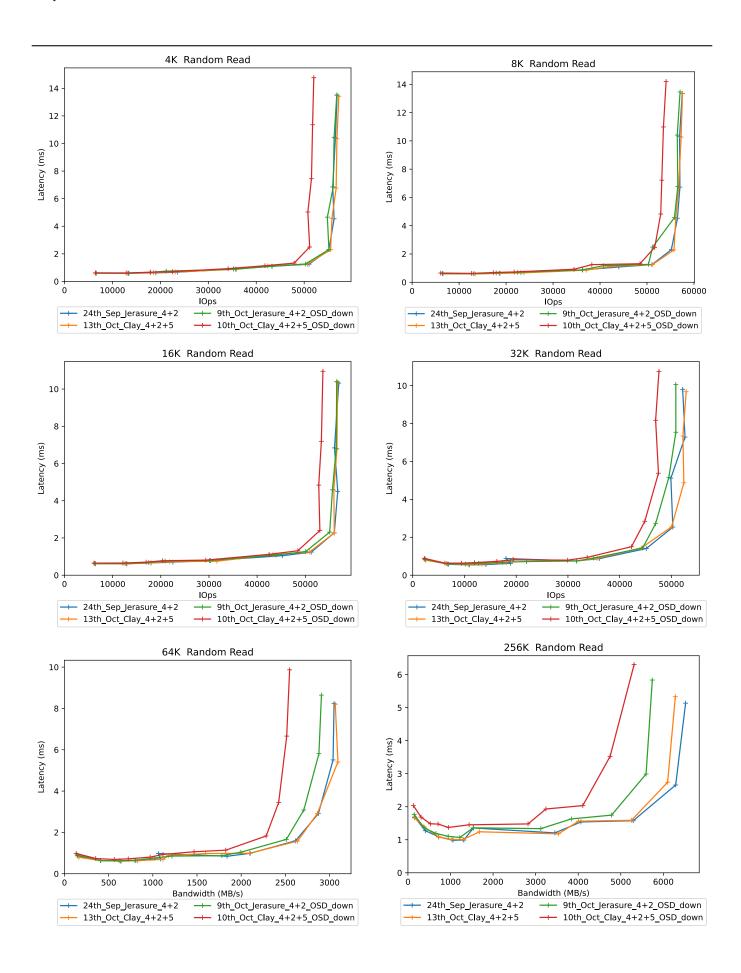


Response Curves Random Read

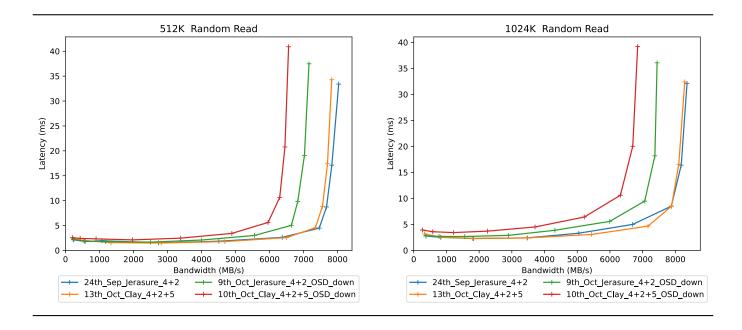


Random Read

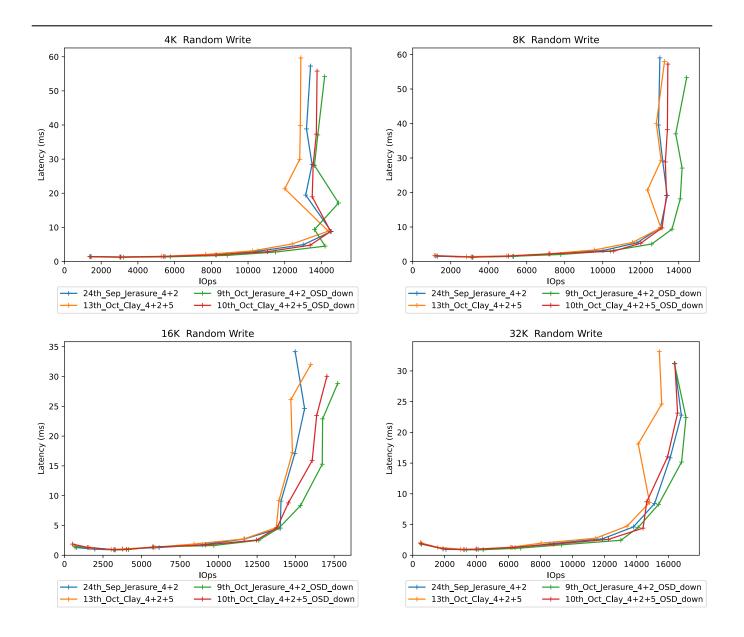
Response Curves Random Read



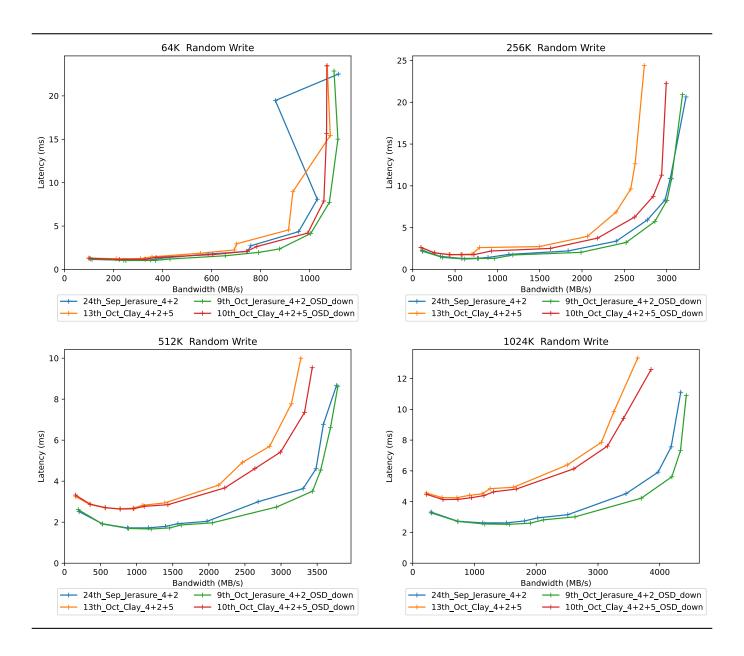
Response Curves Random Write



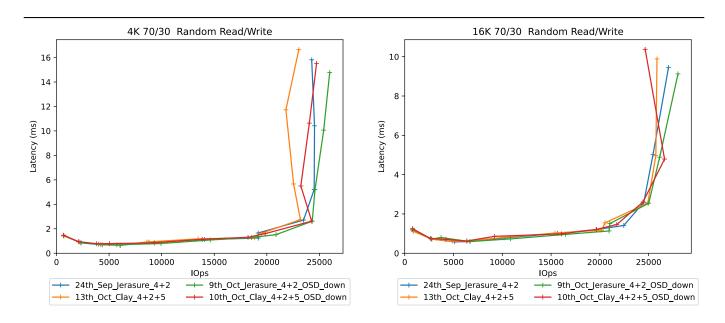
Random Write



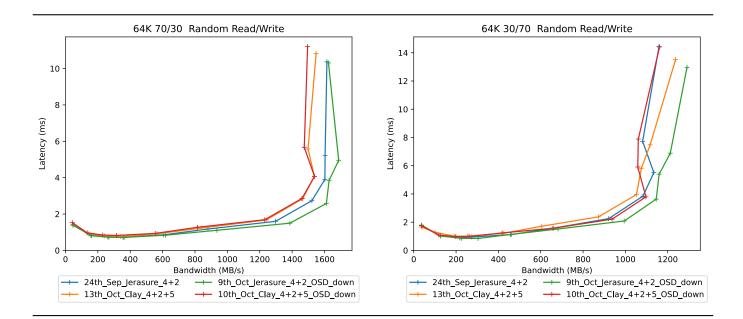
Response Curves Random Read/Write



Random Read/Write



Response Curves 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
  rbdname: cbt-librbdfio
  time: 90
  time_based: true
  use_existing_volumes: true
  vol_size: 1204500
  volumes_per_client:
  - 16
  workloads:
    16k7030:
      jobname: randmix
      mode: randrw
      numjobs:
      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:
      - 8
      - 12
      - 16
      - 24
      - 48
      - 64
      - 128
      - 256
      - 384
```

```
- 588
16krandomwrite:
  jobname: randwrite
 mode: randwrite
 numjobs:
  - 1
 op_size: 16384
  total_iodepth:
  - 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
  - 4
  - 8
  - 16
  - 32
  - 64
  - 128
  - 256
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
```

- 4 - 8 - 12 - 16 - 24 - 32 - 48 - 64 - 96 - 128 - 192 - 256 1Mseqwrite: jobname: seqwrite mode: write numjobs: - 1 op_size: 1048576 ${\tt total_iodepth:}$ - 2 - 4 - 6 - 8 - 16 - 32 - 48 - 64 - 96 - 128 - 160 ${\tt 256krandomread:}$ 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: - 2 - 3 - 4 - 5 - 8 - 16

- 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 - 384 - 512 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
  - 588
  - 768
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
  - 4
  - 8
  - 16
  - 32
  - 64
  - 128
 - 256
  - 512
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 - 4 - 8 - 12 - 16 - 24 - 32 - 48 - 64 - 96 - 128 - 256 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 - 384 64 krandom write:jobname: randwrite mode: randwrite numjobs: - 1 op_size: 65536 total_iodepth: - 2 - 4 - 6 - 8 - 16 - 24 - 32 - 64 - 128 - 256 - 384 64 kseqread: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:
  - 8
  - 12
  - 16
  - 32
  - 48
  - 64
  - 128
  - 256
  - 384
  - 588
  - 768
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 - 288 seq16kwrite: jobname: seqwrite mode: write numjobs: - 1 op_size: 16384 total_iodepth: - 2 - 4 - 8 - 16 - 32 - 48 - 64 - 128 - 256 - 384 - 512 - 768 - 1024 seq256kread: jobname: seqread mode: read numjobs: - 1 op_size: 262144 total_iodepth:

- 1 - 2 - 8 - 16 - 32 - 64 - 128 - 256 - 512 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

```
seq4kread:
  jobname: seqread
 mode: read
 numjobs:
  - 1
 op_size: 4096
  total_iodepth:
  - 2
  - 4
  - 8
  - 12
  - 16
  - 24
  - 32
  - 64
  - 96
  - 128
  - 192
  - 288
  - 384
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
  - 1280
  - 1536
seq8kread:
  jobname: seqread
 mode: read
 numjobs:
  - 1
  op_size: 8192
  total_iodepth:
  - 2
  - 4
  - 8
  - 12
  - 16
  - 24
  - 32
  - 64
  - 96
  - 128
  - 192
  - 288
  - 384
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
        - 1536
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: 8
  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: ljsanders
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
rbdname: cbt-librbdfio
time: 90
time_based: true
use_existing_volumes: true
vol_size: 1204500
volumes_per_client:
- 16
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:
    - 8
    - 12
    - 16
    - 24
    - 48
    - 64
    - 128
    - 256
    - 384
    - 588
  16krandomwrite:
    jobname: randwrite
    mode: randwrite
    numjobs:
    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 - 4 - 8 - 16 - 32 - 64 - 128 - 256 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 - 4 - 8 - 12 - 16 - 24 - 32 - 48 - 64

- 128 - 192 - 256 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:

```
op_size: 32768
  total_iodepth:
  - 2
  - 4
  - 6
  - 8
  - 12
  - 16
  - 24
  - 32
  - 64
  - 128
  - 256
  - 384
  - 512
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
  - 384
4krandomread:
  jobname: randread
 mode: randread
 numjobs:
  - 1
 op_size: 4096
 total_iodepth:
  - 4
  - 8
```

- 12 - 16 - 32 - 48 - 64 - 128 - 256 - 384 - 588 - 768 4krandomwrite: jobname: randwrite mode: randwrite numjobs: - 1 op_size: 4096 total_iodepth: - 4 - 8 - 16 - 32 - 64 - 128 - 256 - 384 - 512 - 768 512krandomread: jobname: randread mode: randread numjobs: - 1 op_size: 524288 total_iodepth: - 1 - 2 - 4 - 8 - 16 - 32 - 64 - 128 - 256 - 512 512krandomwrite: jobname: randwrite mode: randwrite numjobs: - 1 op_size: 524288 total_iodepth: - 1 - 2 - 3 - 4 - 5 - 6 - 8 - 16 - 24 - 32

```
- 64
512kseqread:
  jobname: seqread
 mode: read
 numjobs:
  - 1
 op_size: 524288
  total_iodepth:
  - 2
  - 4
  - 8
  - 12
  - 16
  - 24
  - 32
  - 48
  - 64
  - 96
 - 128
  - 256
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
  - 384
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: - 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 - 588 - 768 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

10th-Oct-Clay-4+2+5-OSD-down

```
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
  - 288
seq16kwrite:
  jobname: seqwrite
 mode: write
 numjobs:
  - 1
  op_size: 16384
  total_iodepth:
  - 2
  - 4
  - 8
  - 16
  - 32
  - 48
  - 64
  - 128
  - 256
  - 384
  - 512
  - 768
  - 1024
seq256kread:
  jobname: seqread
 mode: read
 numjobs:
  - 1
  op_size: 262144
  total_iodepth:
  - 1
  - 2
  - 4
  - 8
  - 16
  - 32
  - 64
  - 128
```

```
- 512
seq256kwrite:
  jobname: seqwrite
 mode: write
 numjobs:
  - 1
  op_size: 262144
  total_iodepth:
  - 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
seq4kread:
  jobname: seqread
 mode: read
 numjobs:
  - 1
 op_size: 4096
 total_iodepth:
  - 2
  - 4
```

- 8 - 12 - 16 - 24 - 32 - 64 - 96 - 128 - 192 - 288 - 384 seq4kwrite: jobname: seqwrite mode: write numjobs: - 1 op_size: 4096 ${\tt total_iodepth:}$ - 2 - 8 - 16 - 24 - 32 - 48 - 64 - 128 - 256 - 384 - 512 - 768 - 1024 - 1280 - 1536 seq8kread: jobname: seqread mode: read numjobs: - 1 op_size: 8192 total_iodepth: - 4 - 8 - 12 - 16 - 24 - 32 - 64 - 96 - 128 - 192 - 288 - 384 seq8kwrite: jobname: seqwrite mode: write numjobs: - 1 op_size: 8192 total_iodepth: - 2 - 8 - 16

Configuration yaml files results

```
- 24
        - 32
        - 48
        - 64
        - 128
        - 256
        - 384
        - 512
        - 768
        - 1024
        - 1280
        - 1536
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: 8
  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: ljsanders
monitoring_profiles:
  collectl:
    args: -c 18 -sCD -i 10 -P -oz -F0 --rawtoo --sep ";" -f {collectl_dir}
```