

Comparitive Performance Report for 3way-reads-osds-6-shardsize-131072 vs 3way-reads-osds-6-shardsize-196608 vs 3way-reads-osds-6-shardsize-262144 vs 3way-reads-osds-6-shardsize-327680 vs 3way-reads-osds-6-shardsize-393216 vs 3way-reads-osds-6-shardsize-458752

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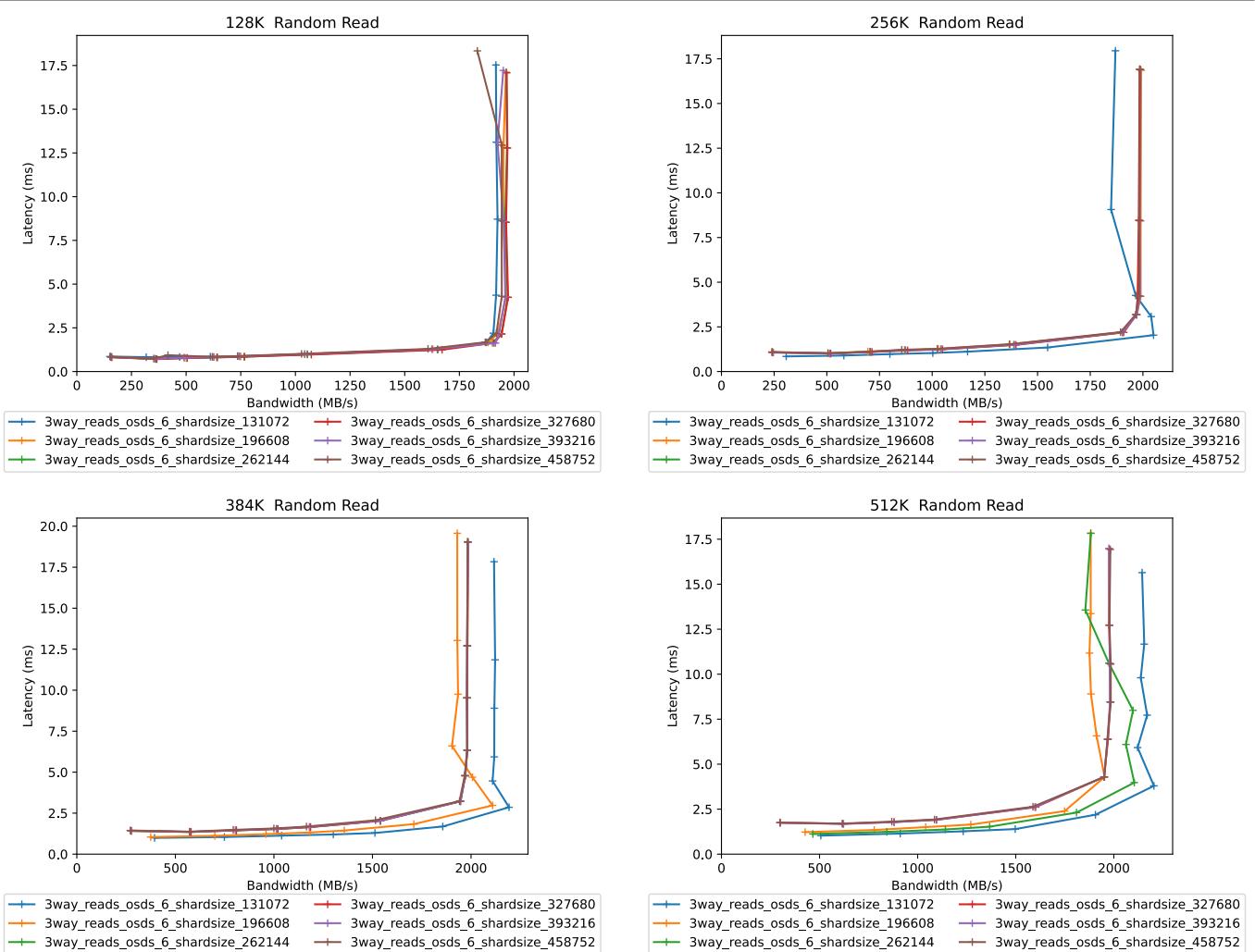
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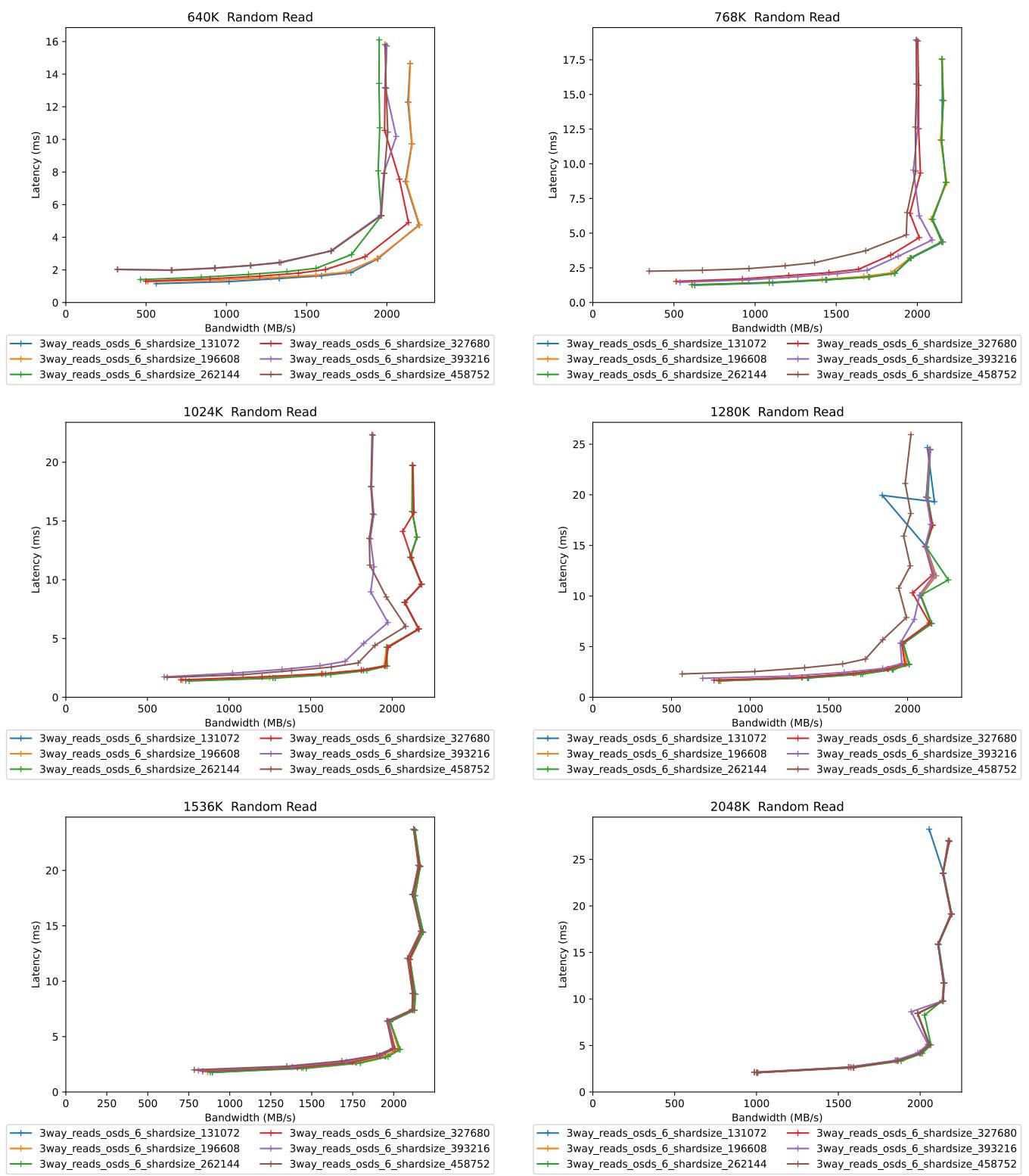
Comparison summary for **3way-reads-osds-6-shardsize-131072** vs **3way-reads-osds-6-shardsize-196608** vs **3way-reads-osds-6-shardsize-262144** vs **3way-reads-osds-6-shardsize-327680** vs **3way-reads-osds-6-shardsize-393216** vs **3way-reads-osds-6-shardsize-458752**

| Random | 3way_reads | osds | 6_shardsize | 131072 | 196608 | 3way_reads | osds | 6_shardsize | 262144 | 3way_reads | osds | 6_shardsize | 327680 | 3way_reads | osds | 6_shardsize | 393216 | 3way_reads | osds | 6_shardsize |
|--------|------------|-----------|-------------|-----------|--------|------------|------|-------------|--------|------------|------|-------------|--------|------------|------|-------------|--------|------------|------|-------------|
| Read | | | | | | | | | | | | | | | | | | | | |
| 128K | 1925@8.7 | 1964@4.3 | 2% | 1971@4.2 | 2% | 1973@4.2 | 2% | 1960@4.3 | 2% | 1944@4.3 | 1% | | | | | | | | | |
| 256K | 2050@2.0 | 1992@16.9 | -3% | 1985@16.9 | -3% | 1984@16.9 | -3% | 1989@16.9 | -3% | 1987@16.9 | -3% | | | | | | | | | |
| 384K | 2193@2.9 | 2109@3.0 | -4% | 1982@19.1 | -10% | 1985@19.0 | -9% | 1985@19.0 | -9% | 1983@19.0 | -10% | | | | | | | | | |
| 512K | 2204@3.8 | 1953@4.3 | -11% | 2104@4.0 | -5% | 1982@8.5 | -10% | 1981@8.5 | -10% | 1984@8.4 | -10% | | | | | | | | | |
| 640K | 2200@4.8 | 2203@4.7 | 0% | 1966@5.3 | -11% | 2135@4.9 | -3% | 2058@10.2 | -6% | 2006@10.4 | -9% | | | | | | | | | |
| 768K | 2179@8.7 | 2181@8.6 | 0% | 2176@8.7 | -0% | 2019@9.3 | -7% | 2091@4.5 | -4% | 1996@15.8 | -8% | | | | | | | | | |
| 1024K | 2181@9.6 | 2180@9.6 | -0% | 2180@9.6 | -0% | 2178@9.6 | -0% | 1974@6.4 | -9% | 2083@6.0 | -4% | | | | | | | | | |
| 1280K | 2181@12.0 | 2177@12.0 | -0% | 2259@11.6 | 4% | 2160@12.1 | -1% | 2167@12.1 | -1% | 2021@25.9 | -7% | | | | | | | | | |
| 1536K | 2180@14.4 | 2178@14.4 | -0% | 2179@14.4 | -0% | 2168@14.5 | -1% | 2165@14.5 | -1% | 2165@14.5 | -1% | | | | | | | | | |
| 2048K | 2192@19.1 | 2191@19.1 | -0% | 2193@19.1 | 0% | 2192@19.1 | 0% | 2189@19.1 | -0% | 2188@19.2 | -0% | | | | | | | | | |

Response Curves

Random Read





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

```
librbd_fio:  
  cmd_path: /usr/local/bin/fio2  
  create_report: true  
  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: 20  
  rbdname: cbt-librbd_fio  
  time: 60  
  time_based: true  
  use_existing_volumes: true  
  vol_size: 1000  
  volumes_per_client:  
    - 8  
  wait_pgautoscaler_timeout: 10  
workloads:  
  1280krandomread:  
    jobname: randread  
    mode: randread  
    numjobs:  
      - 1  
    op_size: 1310720  
    total_iodepth:  
      - 1  
      - 2  
      - 3  
      - 4  
      - 5  
      - 8  
      - 12  
      - 16  
      - 20  
      - 24  
      - 28  
      - 32  
      - 40  
  128krandomread:  
    jobname: randread  
    mode: randread  
    numjobs:  
      - 1  
    op_size: 131072  
    total_iodepth:  
      - 1  
      - 2  
      - 3  
      - 4  
      - 5  
      - 8  
      - 16
```

```
- 24
- 32
- 64
- 128
- 192
- 256
1536krandomread:
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 1572864
  total_iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 10
    - 12
    - 16
    - 20
    - 24
    - 28
    - 32
1Mrandomread:
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 1048576
  total_iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 12
    - 16
    - 20
    - 24
    - 28
    - 32
    - 40
256krandomread:
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 262144
  total_iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 16
    - 24
    - 32
    - 64
```

```
- 128
2Mrandomread:
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 2097152
  total_iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 10
    - 12
    - 16
    - 20
    - 24
    - 28
384krandomread:
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 393216
  total_iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 16
    - 24
    - 32
    - 48
    - 64
    - 96
512krandomread:
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 524288
  total_iodepth:
    - 1
    - 2
    - 3
    - 4
    - 8
    - 16
    - 24
    - 32
    - 40
    - 48
    - 64
640krandomread:
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 655360
```

```
total_iodepth:
  - 1
  - 2
  - 3
  - 4
  - 5
  - 8
  - 16
  - 24
  - 32
  - 40
  - 48
768krandomread:
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 786432
  total_iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 12
    - 16
    - 24
    - 32
    - 40
    - 48
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/fio2
  create_report: true
  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: 20
  rbdname: cbt-librbd_fio
  time: 60
  time_based: true
  use_existing_volumes: true
  vol_size: 1000
  volumes_per_client:
    - 8
  wait_pgautoscaler_timeout: 10
workloads:
  1280krandomread:
    jobname: randread
    mode: randread
    numjobs:
      - 1
    op_size: 1310720
    total_iodepth:
      - 1
      - 2
      - 3
      - 4
      - 5
      - 8
      - 12
      - 16
      - 20
      - 24
      - 28
      - 32
      - 40
  128krandomread:
    jobname: randread
    mode: randread
    numjobs:
      - 1
    op_size: 131072
    total_iodepth:
      - 1
      - 2
      - 3
      - 4
      - 5
      - 8
```

```
- 16
- 24
- 32
- 64
- 128
- 192
- 256
1536krandomread:
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 1572864
  total_iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 10
    - 12
    - 16
    - 20
    - 24
    - 28
    - 32
1Mrandomread:
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 1048576
  total_iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 12
    - 16
    - 20
    - 24
    - 28
    - 32
    - 40
256krandomread:
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 262144
  total_iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 16
    - 24
    - 32
```

```
- 64
- 128
2Mrandomread:
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 2097152
  total_iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 10
    - 12
    - 16
    - 20
    - 24
    - 28
384krandomread:
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 393216
  total_iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 16
    - 24
    - 32
    - 48
    - 64
    - 96
512krandomread:
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 524288
  total_iodepth:
    - 1
    - 2
    - 3
    - 4
    - 8
    - 16
    - 24
    - 32
    - 40
    - 48
    - 64
640krandomread:
  jobname: randread
  mode: randread
  numjobs:
    - 1
```

```
op_size: 655360
total_iodepth:
  - 1
  - 2
  - 3
  - 4
  - 5
  - 8
  - 16
  - 24
  - 32
  - 40
  - 48
768krandomread:
  jobname: randread
  mode: randread
  numjobs:
    - 1
  op_size: 786432
  total_iodepth:
    - 1
    - 2
    - 3
    - 4
    - 5
    - 8
    - 12
    - 16
    - 24
    - 32
    - 40
    - 48
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}
```