Comparitive Performance Report for cbt-6thMar-ecoptmain-4k-8vol-cacheon-rbdoff-appends vs cbt-6thMar-ecoptmain-4k-8vol-cacheon-rbdoff-isal-appends

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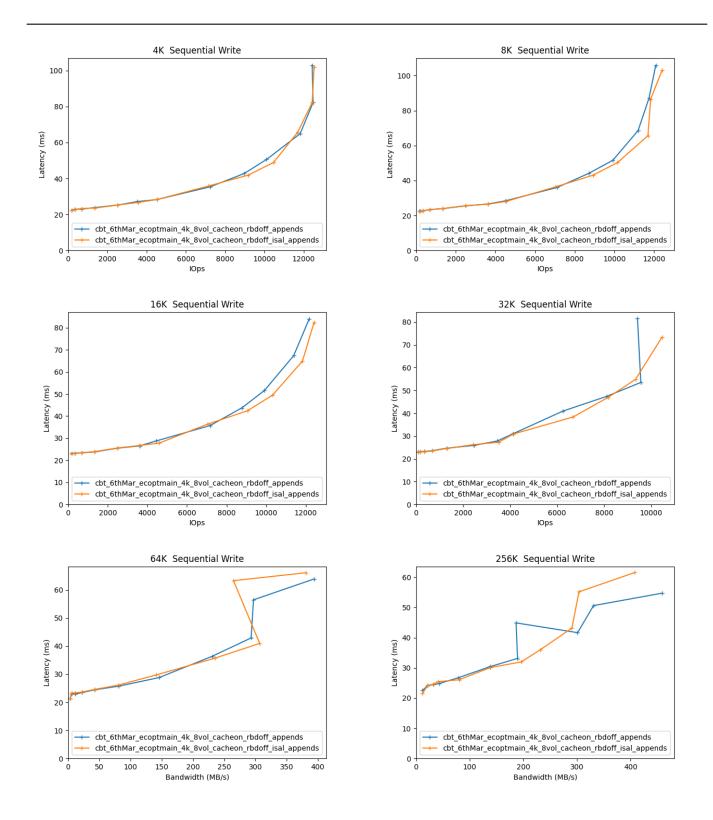
- $\bullet \quad \text{Comparison summary for cbt-} 6 \text{thMar-ecoptmain-} 4 \text{k-8vol-cacheon-rbdoff-appends vs cbt-} 6 \text{thMar-ecoptmain-} 4 \text{k-8vol-cacheon-rbdoff-isal-appends} \\$
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Comparison summary for cbt-6thMar-ecoptmain-4k-8vol-cacheon-rbdoff-appends vs cbt-6thMar-ecoptmain-4k-8vol-cacheon-rbdoff-isal-appends

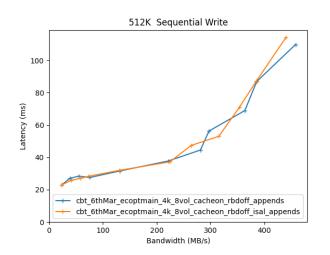
Sequential Write	cbt_6thMar_ecoptmai	n <u>clatk 68 hollacaeloegut m</u> elin	d <u>Mddappedtlsachglupu</u> tbdoff	_isak <u>h</u> appenatency
4K	12481 IOps@82.1ms	12533 IOps@102.0ms	0%	24%
8K	12090 IOps@105.9ms	12409 IOps@103.1ms	3%	-3%
16K	12173 IOps@84.1ms	12417 IOps@82.4ms	2%	-2%
32K	9559 IOps@53.5ms	$10461 \; \mathrm{IOps@73.4ms}$	9%	37%
64K	394 MB/s@63.9 ms	381 MB/s@66.1 ms	-3%	3%
256K	459 MB/s@54.7 ms	408 MB/s@61.6 ms	-11%	13%
512K	458 MB/s@109.8 ms	440 MB/s@114.2 ms	-4%	4%
1024K	465 MB/s@107.9 ms	498 MB/s@134.6 ms	7%	25%

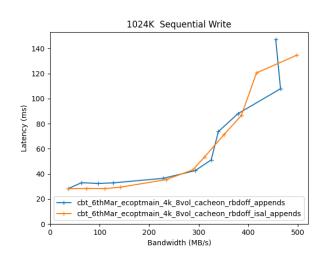
Response Curves

Sequential Write



Response Curves Sequential 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: 60
  time_based: true
  use_existing_volumes: true
  vol_size: 1000
  volumes_per_client:
  workloads:
    64kseqwriteappend:
      jobname: write
      mode: write
      numjobs:
      - 1
      op_size: 65536
      pre_workload_script: /cbt.lee/tools/setup_cluster/mkdelvols.cbt
      total_iodepth:
      - 1
      - 2
      - 4
      - 8
      - 16
      - 32
      - 64
      - 128
      - 192
      - 256
      - 384
    seq16kwriteappend:
      jobname: seqwrite
      mode: write
      numjobs:
      - 1
      pre_workload_script: /cbt.lee/tools/setup_cluster/mkdelvols.cbt
      total_iodepth:
      - 4
      - 8
      - 16
      - 32
      - 64
      - 96
      - 128
      - 256
      - 384
      - 512
```

```
- 768
  - 1024
seq1Mwriteappend:
  jobname: seqwrite
 mode: write
 numjobs:
  - 1
  op_size: 1048576
  pre_workload_script: /cbt.lee/tools/setup_cluster/mkdelvols.cbt
  total_iodepth:
  - 1
  - 2
  - 3
  - 4
 - 8
  - 12
  - 16
  - 24
  - 32
  - 48
  - 64
{\tt seq256kwriteappend:}
  jobname: seqwrite
 mode: write
 numjobs:
  - 1
  op_size: 262144
  pre_workload_script: /cbt.lee/tools/setup_cluster/mkdelvols.cbt
  total_iodepth:
  - 1
  - 2
  - 3
  - 4
  - 8
  - 16
  - 24
  - 32
  - 48
 - 64
  - 96
seq32kwriteappend:
 jobname: seqwrite
 mode: write
 numjobs:
  - 1
  op_size: 32768
  pre_workload_script: /cbt.lee/tools/setup_cluster/mkdelvols.cbt
  total_iodepth:
  - 2
  - 4
  - 8
  - 16
  - 32
 - 64
  - 96
  - 128
  - 256
  - 384
  - 512
  - 768
seq4kwriteappend:
  jobname: seqwrite
  mode: write
```

```
numjobs:
        - 1
        op_size: 4096
        pre_workload_script: /cbt.lee/tools/setup_cluster/mkdelvols.cbt
        total_iodepth:
        - 8
        - 16
        - 32
        - 64
        - 96
        - 128
        - 256
        - 384
        - 512
        - 768
        - 1024
        - 1280
      seq512kwriteappend:
        jobname: seqwrite
        mode: write
        numjobs:
        - 1
        op_size: 524288
        pre_workload_script: /cbt.lee/tools/setup_cluster/mkdelvols.cbt
        total_iodepth:
        - 1
        - 2
        - 3
        - 4
        - 8
        - 16
        - 24
        - 32
        - 48
        - 64
        - 96
      seq8kwriteappend:
        jobname: seqwrite
        mode: write
        numjobs:
        - 1
        op_size: 8192
        pre_workload_script: /cbt.lee/tools/setup_cluster/mkdelvols.cbt
        total_iodepth:
        - 4
        - 8
        - 16
        - 32
        - 64
        - 96
        - 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}
  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: 60
    time_based: true
    use_existing_volumes: true
    vol_size: 1000
    volumes_per_client:
    - 8
    workloads:
      64kseqwriteappend:
        jobname: write
        mode: write
        numjobs:
        - 1
        op_size: 65536
        pre_workload_script: /cbt.lee/tools/setup_cluster/mkdelvols.cbt
        total_iodepth:
        - 1
```

```
- 2
  - 4
  - 8
  - 16
  - 32
 - 64
  - 128
 - 192
 - 256
  - 384
seq16kwriteappend:
  jobname: seqwrite
 mode: write
 numjobs:
  - 1
  op_size: 16384
  pre_workload_script: /cbt.lee/tools/setup_cluster/mkdelvols.cbt
  total_iodepth:
  - 4
  - 8
  - 16
  - 32
  - 64
  - 96
  - 128
  - 256
  - 384
  - 512
  - 768
  - 1024
{\tt seq1Mwriteappend:}
  jobname: seqwrite
 mode: write
 numjobs:
  - 1
  op_size: 1048576
 pre_workload_script: /cbt.lee/tools/setup_cluster/mkdelvols.cbt
 total_iodepth:
  - 1
  - 2
  - 3
  - 4
  - 8
  - 12
  - 16
  - 24
  - 32
  - 48
  - 64
seq256kwriteappend:
  jobname: seqwrite
 mode: write
 numjobs:
  - 1
  op_size: 262144
  pre_workload_script: /cbt.lee/tools/setup_cluster/mkdelvols.cbt
  total_iodepth:
  - 1
  - 2
  - 3
  - 4
  - 8
  - 16
```

```
- 24
  - 32
  - 48
  - 64
  - 96
seq32kwriteappend:
  jobname: seqwrite
 mode: write
 numjobs:
  - 1
 op_size: 32768
 pre_workload_script: /cbt.lee/tools/setup_cluster/mkdelvols.cbt
  total_iodepth:
  - 2
  - 4
  - 8
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  - 32
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  - 96
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  - 256
 - 384
  - 512
  - 768
seq4kwriteappend:
  jobname: seqwrite
  mode: write
 numjobs:
  - 1
  op_size: 4096
  pre_workload_script: /cbt.lee/tools/setup_cluster/mkdelvols.cbt
  total_iodepth:
  - 4
  - 8
  - 16
  - 32
  - 64
  - 96
  - 128
  - 256
  - 384
  - 512
  - 768
  - 1024
  - 1280
seq512kwriteappend:
  jobname: seqwrite
 mode: write
 numjobs:
  - 1
  op_size: 524288
 pre_workload_script: /cbt.lee/tools/setup_cluster/mkdelvols.cbt
  total_iodepth:
  - 1
  - 2
  - 3
  - 4
  - 8
  - 16
  - 24
  - 32
  - 48
```

```
- 64
        - 96
      seq8kwriteappend:
        jobname: seqwrite
        mode: write
        numjobs:
        - 1
        op_size: 8192
        pre_workload_script: /cbt.lee/tools/setup_cluster/mkdelvols.cbt
        total_iodepth:
        - 4
        - 8
        - 16
        - 32
        - 64
        - 96
        - 128
        - 256
        - 384
        - 512
        - 768
        - 1024
        - 1280
cluster:
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  ceph-osd_cmd: /usr/bin/ceph-osd
  ceph-run_cmd: /usr/bin/ceph-run
  ceph_cmd: /usr/bin/ceph
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  mons:
   --- server1 ---:
      a: --- IP Address --:6789
  mount_opts: -o inode64,noatime,logbsize=256k
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  osds_per_node: 6
  pdsh_ssh_args: -a -x -1%u %h
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