Comparitive Performance Report for cbt-19thFeb-ecoptmain-8vol-finegrain-cacheon-rbdoff-allappends vs cbt-20thFeb-main-8vol-finegrain-cacheon-rbdoff-allappends

Table of contents

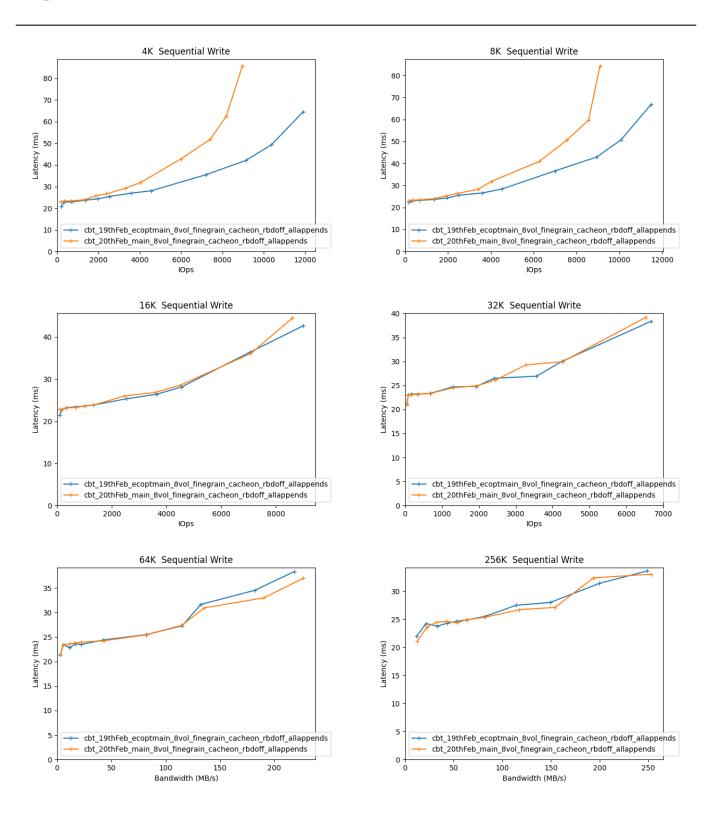
- $\bullet \quad \text{Comparison summary for cbt-19thFeb-ecopt main-8vol-fine grain-cache on-rbd of f-all appends} \ \ \text{vs cbt-20thFeb-main-8vol-fine grain-cache on-rbd of f-all appends} \\$
- Response Curves
 - Sequential Write
- Configuration yaml files
 - results

Comparison summary for cbt-19thFeb-ecoptmain-8vol-finegrain-cacheon-rbdoff-allappends vs cbt-20thFeb-main-8vol-finegrain-cacheon-rbdoff-allappends

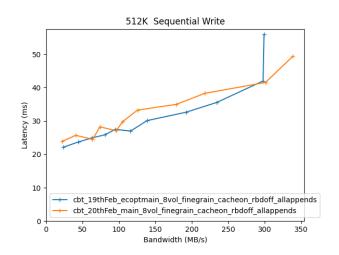
Sequential Write	cbt_19thFeb_ecoptmain	ncb8v2l0thFegrainainac8vol	<u>Kanang final applepds</u> rbdo	ff_%ddappendstency
4K	11900 IOps@64.5ms	8959 IOps@85.7ms	-25%	33%
8K	11480 IOps@66.9ms	9096 IOps@84.4ms	-21%	26%
16K	8996 IOps@42.7ms	8613 IOps@44.6ms	-4%	4%
32K	6670 IOps@38.4ms	6530 IOps@39.2ms	-2%	2%
64K	219 MB/s@38.4ms	227 MB/s@37.0 ms	4%	-4%
256K	249 MB/s@33.6 ms	253 MB/s@33.0 ms	2%	-2%
512K	299 MB/s@55.9 ms	339 MB/s@49.3 ms	13%	-12%
1024K	372 MB/s@55.9 ms	383 MB/s@54.4 ms	3%	-3%

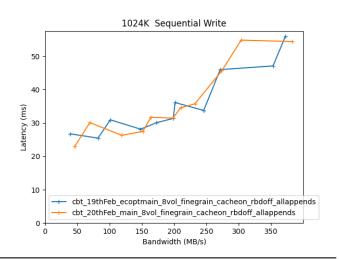
Response Curves

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: 90
  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
      - 6
      - 8
      - 16
      - 32
      - 48
      - 64
      - 96
      - 128
    seq16kwriteappend:
      jobname: seqwrite
      mode: write
      numjobs:
      - 1
      pre_workload_script: /cbt.lee/tools/setup_cluster/mkdelvols.cbt
      total_iodepth:
      - 2
      - 4
      - 8
      - 16
      - 24
      - 32
      - 64
      - 96
      - 128
      - 256
```

```
- 384
seq1Mwriteappend:
  jobname: seqwrite
 mode: write
 numjobs:
  - 1
 op_size: 1048576
 pre_workload_script: /cbt.lee/tools/setup_cluster/mkdelvols.cbt
  total_iodepth:
  - 2
  - 3
  - 4
  - 5
  - 6
  - 7
  - 8
  - 12
  - 16
  - 20
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
  - 5
  - 6
  - 8
  - 12
  - 16
  - 24
  - 32
seq32kwriteappend:
  jobname: seqwrite
 mode: write
 numjobs:
  - 1
  op_size: 32768
  pre_workload_script: /cbt.lee/tools/setup_cluster/mkdelvols.cbt
  total_iodepth:
  - 1
  - 2
  - 4
  - 8
  - 16
  - 32
 - 48
  - 64
  - 96
  - 128
  - 256
seq4kwriteappend:
  jobname: seqwrite
 mode: write
 numjobs:
  - 1
```

Configuration yaml files results

```
op_size: 4096
        pre_workload_script: /cbt.lee/tools/setup_cluster/mkdelvols.cbt
        total_iodepth:
        - 8
        - 16
        - 32
        - 48
        - 64
        - 96
        - 128
        - 256
        - 384
        - 512
        - 768
      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
        - 5
        - 6
        - 8
        - 12
        - 16
        - 24
        - 32
      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
        - 48
        - 64
        - 96
        - 128
        - 256
        - 384
        - 512
        - 768
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: 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: 1000
    volumes_per_client:
   workloads:
      64kseqwriteappend:
        jobname: write
        mode: write
        numjobs:
        op_size: 65536
        pre_workload_script: /cbt.lee/tools/setup_cluster/mkdelvols.cbt
        total_iodepth:
        - 1
        - 2
        - 4
        - 6
        - 8
```

```
- 16
  - 32
  - 48
  - 64
  - 96
  - 128
seq16kwriteappend:
  jobname: seqwrite
  mode: write
 numjobs:
  - 1
  op_size: 16384
  pre_workload_script: /cbt.lee/tools/setup_cluster/mkdelvols.cbt
  total_iodepth:
  - 2
  - 4
  - 8
  - 16
  - 24
  - 32
  - 64
  - 96
  - 128
  - 256
  - 384
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
  - 5
  - 6
  - 7
  - 8
  - 12
  - 16
  - 20
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
  - 5
  - 6
  - 8
  - 12
  - 16
  - 24
  - 32
```

```
seq32kwriteappend:
  jobname: seqwrite
 mode: write
 numjobs:
  - 1
  op_size: 32768
 pre_workload_script: /cbt.lee/tools/setup_cluster/mkdelvols.cbt
  total_iodepth:
  - 1
  - 2
  - 4
  - 8
  - 16
  - 32
  - 48
  - 64
  - 96
  - 128
  - 256
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
  - 48
  - 64
  - 96
  - 128
  - 256
 - 384
 - 512
 - 768
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
  - 5
  - 6
  - 8
  - 12
  - 16
  - 24
  - 32
seq8kwriteappend:
  jobname: seqwrite
 mode: write
 numjobs:
  - 1
```

Configuration yaml files results

```
op_size: 8192
        pre_workload_script: /cbt.lee/tools/setup_cluster/mkdelvols.cbt
        total_iodepth:
        - 8
        - 16
        - 32
        - 48
        - 64
        - 96
        - 128
        - 256
        - 384
        - 512
        - 768
cluster:
  archive_dir: /tmp/cbt
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  ceph-osd_cmd: /usr/bin/ceph-osd
  ceph-run_cmd: /usr/bin/ceph-run
  ceph_cmd: /usr/bin/ceph
  clients:
  - --- server1 ---
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  mons:
   --- server1 ---:
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  mount_opts: -o inode64,noatime,logbsize=256k
  osds:
  - --- server1 ---
  osds_per_node: 6
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