Comparitive Performance Report for cbt-17thMar-4k-main-8vol-cacheon-rbdoff-isal-appends vs cbt-16thMar-4k-erasurechunks-8vol-cacheon-rbdoff-isal-appendsv3

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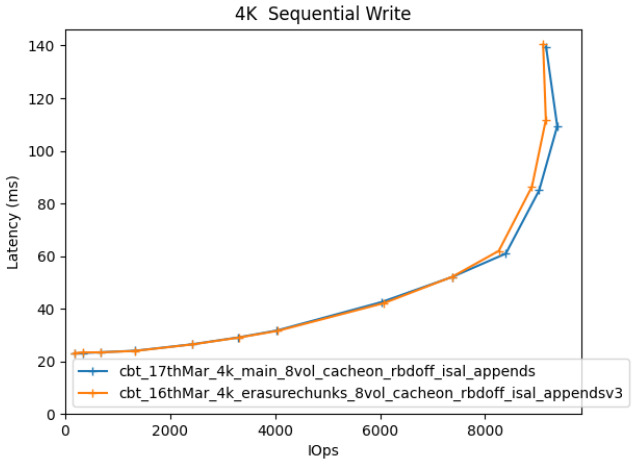
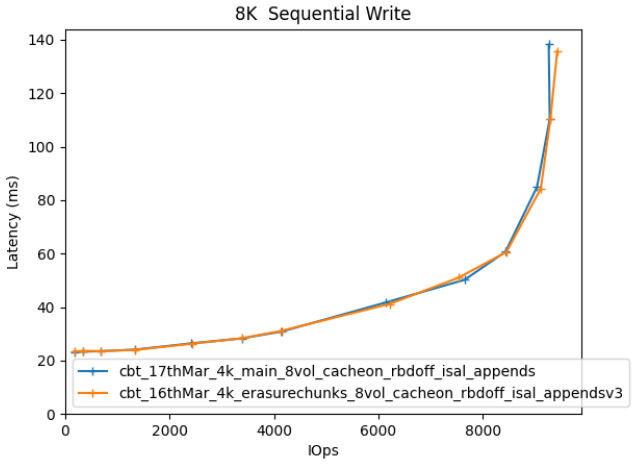
Comparison summary for cbt-17thMar-4k-main-8vol-cacheon-rbdoff-isal-appends vs cbt-16thMar-4k-erasurechunks-8vol-cacheon-rbdoff-isal-appendsv3

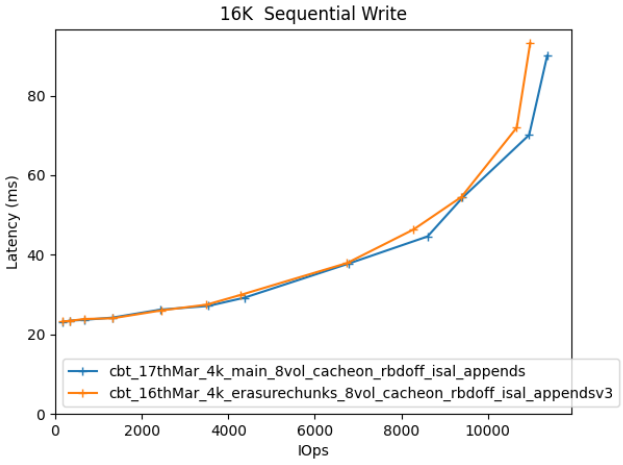
Sequential Write	cbt_17thMar_4k_main_8vol_cacheon_rbdoff_isal_appends	cbt_16thMar_4k_erasurechunks_8vol_cacheon_rbdoff_isal_appendsv3	% change throughput	% change latency
4K	9378 IOps@109.4ms	9160 IOps@111.8ms	-2%	2%
8K	9280 IOps@110.3ms	9424 IOps@135.8ms	2%	23%
16K	11369 IOps@90.0ms	10976 IOps@93.2ms	-3%	4%
32K	9810 IOps@78.2ms	9747 IOps@78.8ms	-1%	1%
64K	347 MB/s@72.5ms	339 MB/s@74.3ms	-2%	2%
256K	370 MB/s@68.0ms	368 MB/s@68.3ms	-1%	0%
512K	337 MB/s@149.1ms	398 MB/s@126.2ms	18%	-15%
1024K	456 MB/s@146.8ms	427 MB/s@157.2ms	-6%	7%

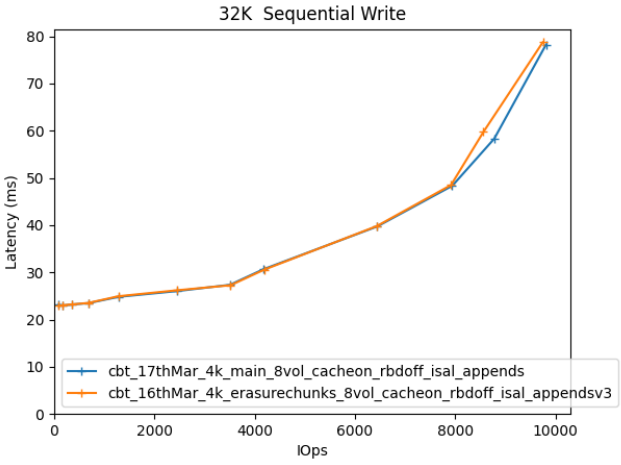
Response Curves

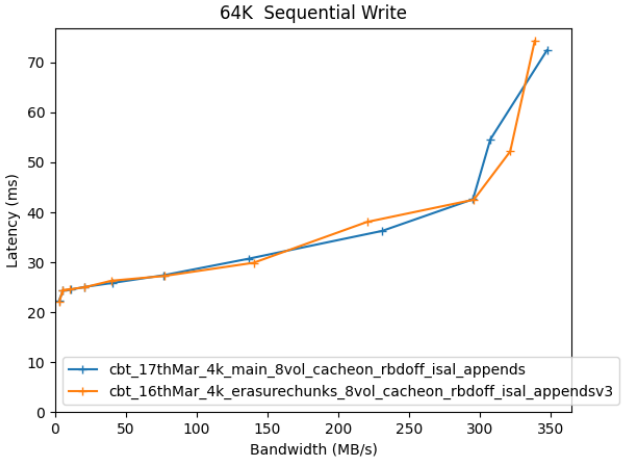
Sequential Write

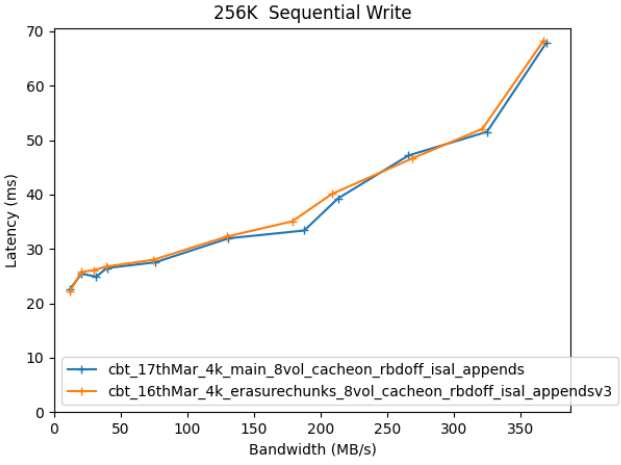


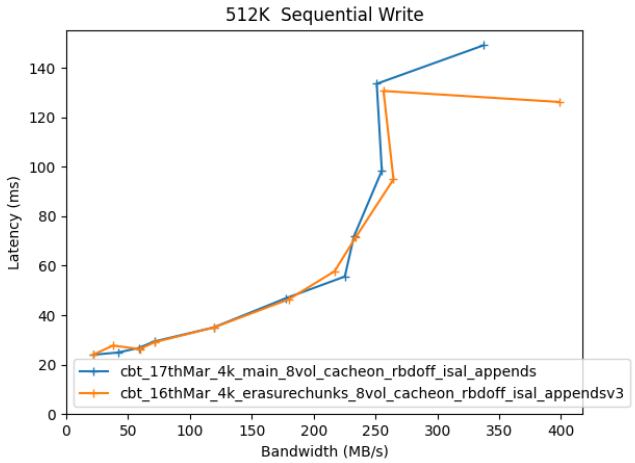


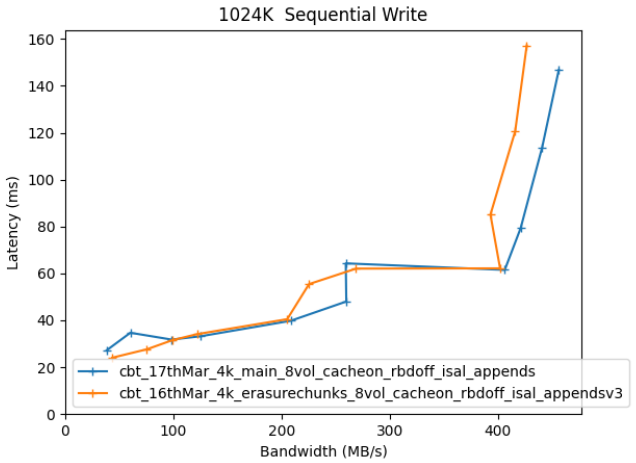









512K Sequential Write
Latency (ms)
Bandwidth (MB/s)
cbt_17thMar_4k_main_8vol_cacheon_rbdoff_isal_appends
cbt_16thMar_4k_erasurechunks_8vol_cacheon_rbdoff_isal_appendsv3


1024K Sequential Write
Latency (ms)
Bandwidth (MB/s)
cbt_17thMar_4k_main_8vol_cacheon_rbdoff_isal_appends
cbt_16thMar_4k_erasurechunks_8vol_cacheon_rbdoff_isal_appendsv3

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:
  - 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
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
  - 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:
        - 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:
  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: 90
    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
  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
    - 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:
    - 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:
  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
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  - --- 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}
```