

Comparitive Performance Report for cbt-15thNov25-4k-o01-6+2-squid-appends vs
cbt-15thNov25-16k-o01-2+2-tentacle-appends vs cbt-15thNov25-16k-o01-4+2-tentacle-appends vs
cbt-15thNov25-16k-o01-6+2-tentacle-appends

Comparitive Performance Report for cbt-15thNov25-4k-o01-6+2-squid-appends vs cbt-15thNov25-16k-o01-2+2-tentacle-appends vs cbt-15thNov25-16k-o01-4+2-tentacle-appends vs cbt-15thNov25-16k-o01-6+2-tentacle-appends

Table of contents

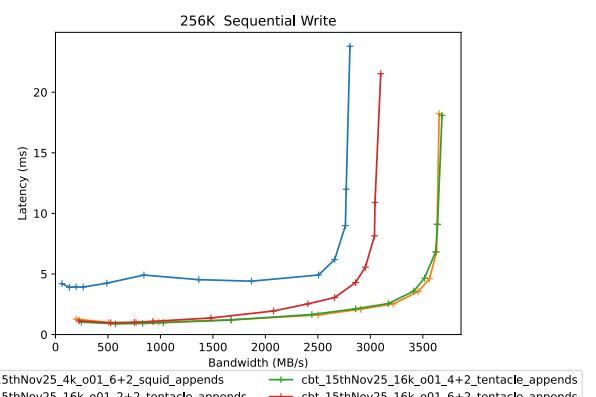
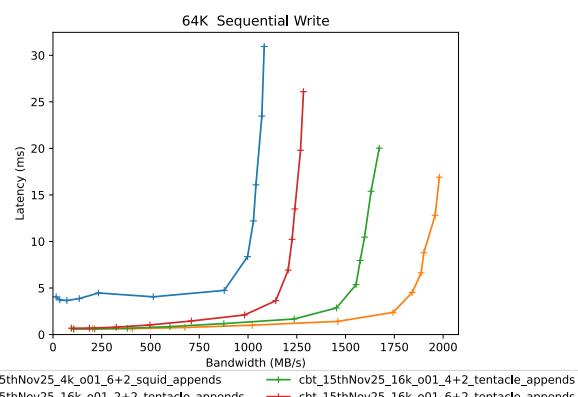
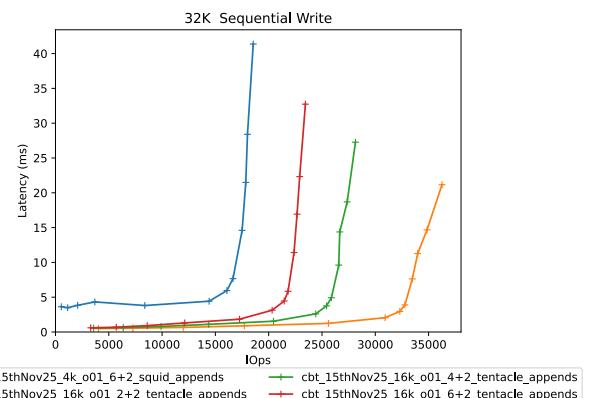
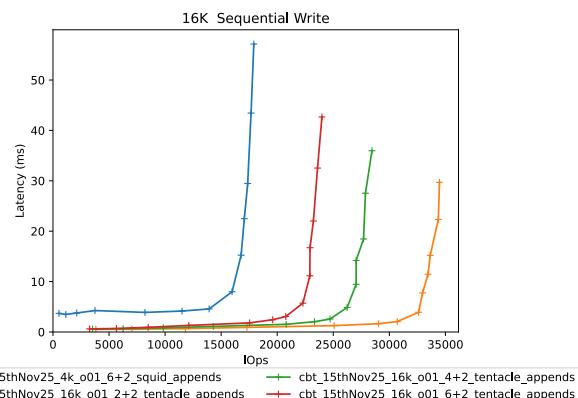
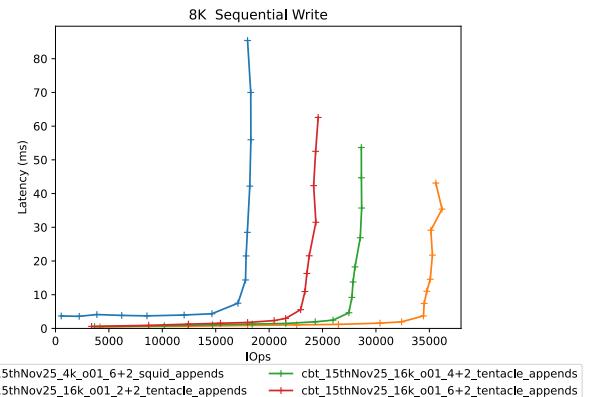
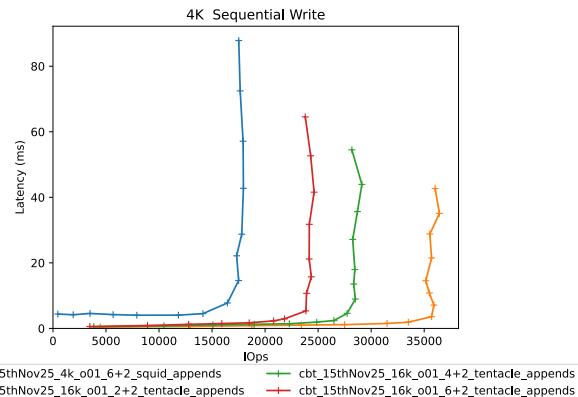
- Comparison summary for cbt-15thNov25-4k-o01-6+2-squid-appends vs cbt-15thNov25-16k-o01-2+2-tentacle-appends vs cbt-15thNov25-16k-o01-4+2-tentacle-appends vs cbt-15thNov25-16k-o01-6+2-tentacle-appends
- Response Curves
 - Sequential Write
- Configuration yaml files
 - results

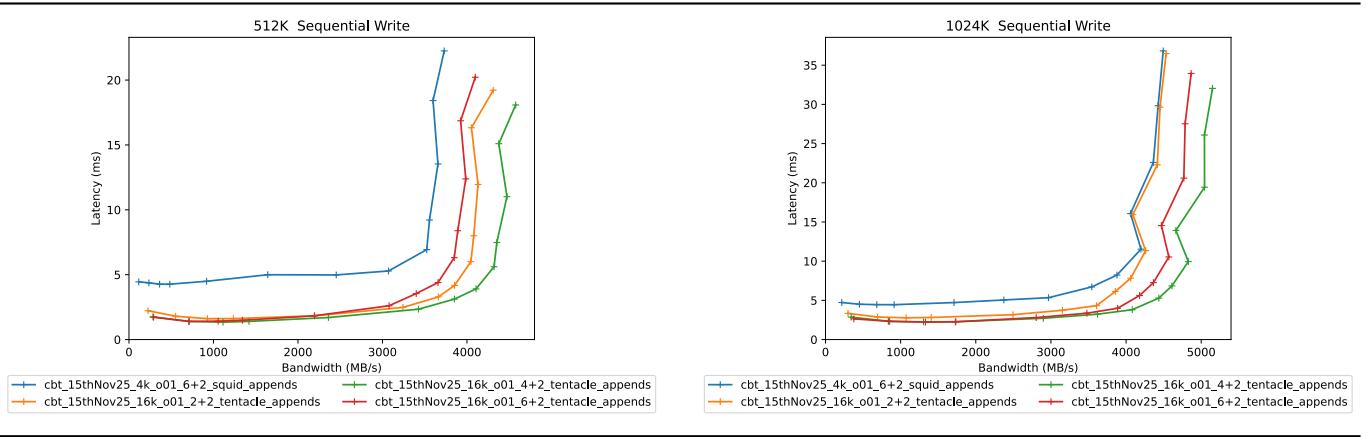
Comparison summary for cbt-15thNov25-4k-o01-6+2-squid-appends vs cbt-15thNov25-16k-o01-2+2-tentacle-appends vs cbt-15thNov25-16k-o01-4+2-tentacle-appends vs cbt-15thNov25-16k-o01-6+2-tentacle-appends

Sequential Write	cbt_15thNov25bt4k15thNov622_6khndppms	cbt_15thNov25ppms	cbt_15thNov25ppms	cbt_15thNov25ppms	cbt_15thNov25ppms	cbt_15thNov25ppms	cbt_15thNov25ppms
4K	17958@42.7ms	36438@35.1	103%	29126@43.9	62%	24621@41.6	37%
8K	18295@56.0ms	36184@35.4	98%	28664@35.7	57%	24593@62.6	34%
16K	17914@57.1ms	34474@29.7	92%	28450@36.0	59%	23988@42.7	34%
32K	18551@41.4ms	36259@21.2	95%	28140@27.3	52%	23445@32.7	26%
64K	1083@30.9ms	1981@16.9	83%	1673@20.0	54%	1284@26.1	19%
256K	2806@23.8ms	3656@18.2	30%	3683@18.1	31%	3099@21.5	10%
512K	3731@22.2ms	4311@19.2	16%	4576@18.1	23%	4098@20.2	10%
1024K	4495@36.8ms	4533@36.5	1%	5150@32.0	15%	4866@33.9	8%

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

```

librbd_fio:
  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-librbd_fio
  time: 90
  time_based: true
  use_existing_volumes: true
  vol_size: 1000
  volumes_per_client:
    - 16
  wait_pgautoscaler_timeout: 20
workloads:
  64kseqwriteappend:
    jobname: write
    mode: write
    numjobs:
      - 1
    op_size: 65536
    pre_workload_script: sudo /home/ljsanders/scripts/mkdelvols.cbt
    total_iodepth:
      - 1
      - 2
      - 4
      - 8
      - 16
      - 32
      - 64
      - 128
      - 192
      - 256
      - 384
      - 512
  seq16kwriteappend:
    jobname: seqwrite
    mode: write
    numjobs:
      - 1
    op_size: 16384
    pre_workload_script: sudo /home/ljsanders/scripts/mkdelvols.cbt
    total_iodepth:
      - 2
      - 4
      - 8
      - 16
      - 32
      - 48
      - 64

```

```
- 128
- 256
- 384
- 512
- 768
- 1024
seq1Mwriteappend:
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
  op_size: 1048576
  pre_workload_script: sudo /home/ljsanders/scripts/mkdelvols.cbt
  total_iodepth:
    - 1
    - 2
    - 3
    - 4
    - 8
    - 12
    - 16
    - 24
    - 32
    - 48
    - 64
    - 96
    - 128
    - 160
seq256kwriteappend:
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
  op_size: 262144
  pre_workload_script: sudo /home/ljsanders/scripts/mkdelvols.cbt
  total_iodepth:
    - 1
    - 2
    - 3
    - 4
    - 8
    - 16
    - 24
    - 32
    - 48
    - 64
    - 96
    - 128
    - 256
seq32kwriteappend:
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
  op_size: 32768
  pre_workload_script: sudo /home/ljsanders/scripts/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: sudo /home/ljsanders/scripts/mkdelvols.cbt
  total_iodepth:
    - 2
    - 8
    - 16
    - 24
    - 32
    - 48
    - 64
    - 128
    - 256
    - 384
    - 512
    - 768
    - 1024
    - 1280
    - 1536
seq512kwriteappend:
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
  op_size: 524288
  pre_workload_script: sudo /home/ljsanders/scripts/mkdelvols.cbt
  total_iodepth:
    - 1
    - 2
    - 3
    - 4
    - 8
    - 16
    - 24
    - 32
    - 48
    - 64
    - 96
    - 128
    - 160
seq8kwriteappend:
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
  op_size: 8192
  pre_workload_script: sudo /home/ljsanders/scripts/mkdelvols.cbt
  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: /etc/ceph/ceph.conf
  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 -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}
  librbd_fio:
    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-librbd_fio
```

```
time: 90
time_based: true
use_existing_volumes: true
vol_size: 1000
volumes_per_client:
- 16
wait_pgautoscaler_timeout: 20
workloads:
  64kseqwriteappend:
    jobname: write
    mode: write
    numjobs:
      - 1
    op_size: 65536
    pre_workload_script: sudo /home/ljsanders/scripts/mkdelvols.cbt
    total_iodepth:
      - 1
      - 2
      - 4
      - 8
      - 16
      - 32
      - 64
      - 128
      - 192
      - 256
      - 384
      - 512
  seq16kwriteappend:
    jobname: seqwrite
    mode: write
    numjobs:
      - 1
    op_size: 16384
    pre_workload_script: sudo /home/ljsanders/scripts/mkdelvols.cbt
    total_iodepth:
      - 2
      - 4
      - 8
      - 16
      - 32
      - 48
      - 64
      - 128
      - 256
      - 384
      - 512
      - 768
      - 1024
  seq1Mwriteappend:
    jobname: seqwrite
    mode: write
    numjobs:
      - 1
    op_size: 1048576
    pre_workload_script: sudo /home/ljsanders/scripts/mkdelvols.cbt
    total_iodepth:
      - 1
      - 2
      - 3
      - 4
      - 8
      - 12
```

```
- 16
- 24
- 32
- 48
- 64
- 96
- 128
- 160
seq256kwriteappend:
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
  op_size: 262144
  pre_workload_script: sudo /home/ljsanders/scripts/mkdelvols.cbt
  total_iodepth:
    - 1
    - 2
    - 3
    - 4
    - 8
    - 16
    - 24
    - 32
    - 48
    - 64
    - 96
    - 128
    - 256
seq32kwriteappend:
  jobname: seqwrite
  mode: write
  numjobs:
    - 1
  op_size: 32768
  pre_workload_script: sudo /home/ljsanders/scripts/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: sudo /home/ljsanders/scripts/mkdelvols.cbt
  total_iodepth:
    - 2
    - 8
    - 16
    - 24
    - 32
    - 48
```

```
- 64
- 128
- 256
- 384
- 512
- 768
- 1024
- 1280
- 1536
seq512kwriteappend:
  jobname: seqwrite
  mode: write
  numjobs:
  - 1
  op_size: 524288
  pre_workload_script: sudo /home/ljsanders/scripts/mkdelvols.cbt
  total_iodepth:
  - 1
  - 2
  - 3
  - 4
  - 8
  - 16
  - 24
  - 32
  - 48
  - 64
  - 96
  - 128
  - 160
seq8kwriteappend:
  jobname: seqwrite
  mode: write
  numjobs:
  - 1
  op_size: 8192
  pre_workload_script: sudo /home/ljsanders/scripts/mkdelvols.cbt
  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: /etc/ceph/ceph.conf
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 -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 -FO --rawtoo --sep ";" -f {collectl_dir}
```