Comparitive Performance Report for cbt-3rdApr-4k-squid192-6+2-o01-rbdsimple-isal vs cbt-7thApr-4k-ecopt2-o01-pdwauto-6+2 vs cbt-7thApr-16k-ecopt2-o01-pdwauto-6+2 vs cbt-3way-squid-o01

cbt-3rdApr-4k-squid192-6+2-o01-rbdsimple-isal vs cbt-7thApr-4k-ecopt2-o01-pdwauto-6+2 vs
cbt-7thApr-16k-ecopt2-o01-pdwauto-6+2 vs cbt-3way-squid-o01

July 22, 2025

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Comparison summary for cbt-3rdApr-4k-squid192-6+2-o01-rbdsimple-isal vs cbt-7thApr-4k-ecopt2-o01-pdwauto-6+2 vs cbt-7thApr-16k-ecopt2-o01-pdwauto-6+2 vs cbt-3way-squid-o01

Sequential Read	cbt_3rdApr_4k_squid192	7thApr_4k_ecopt2_pdwauto6+2	% change	7thApr_16k_ecopt2_pdwauto6+2	% change	cbt_3way_squid_o01	% change
4.0K	63542@4.5ms	173648@2.2	173%	165781@2.3	161%	134043@0.7	111%
8.0K	58143@4.9ms	106337@3.6	83%	155919@2.5	168%	123714@1.0	113%
16.0K	50688@5.7ms	60782@4.7	20%	147199@2.0	190%	109212@2.6	115%
32.0K	40688@4.7ms	41329@4.6	2%	73383@0.9	80%	89668@2.1	120%
64.0K	2421@6.9ms	2372@5.3	-2%	3287@5.1	36%	4574@3.7	89%
256.0K	5012@3.3ms	5308@3.2	6%	5638@3.0	12%	7908@2.1	58%
512.0K	5526@3.0ms	5738@2.9	4%	6163@2.7	12%	8027@2.1	45%
1024.0K	5406@3.9ms	5670@3.7	5%	6240@3.3	15%	6710@3.1	24%

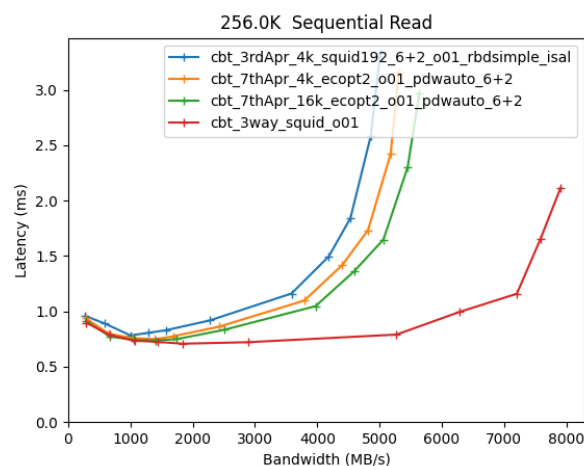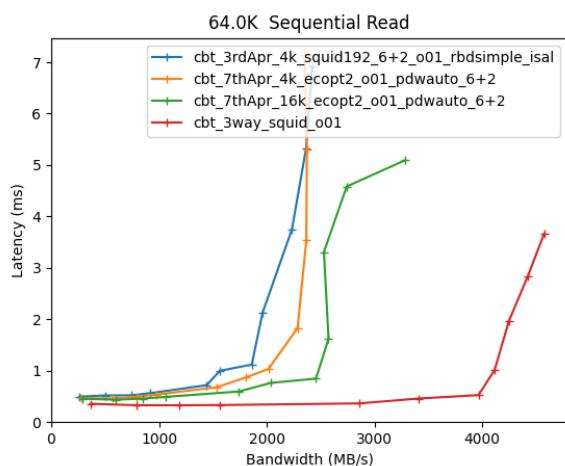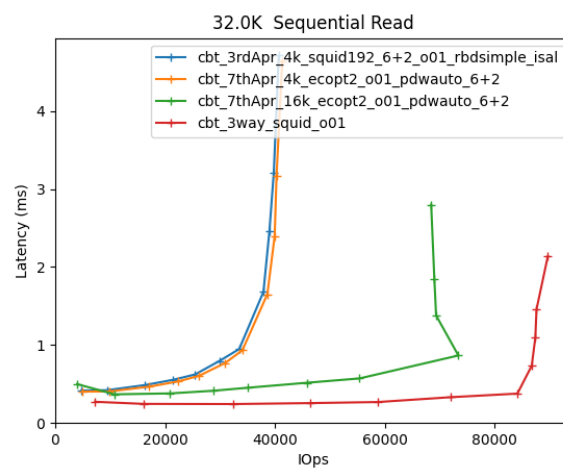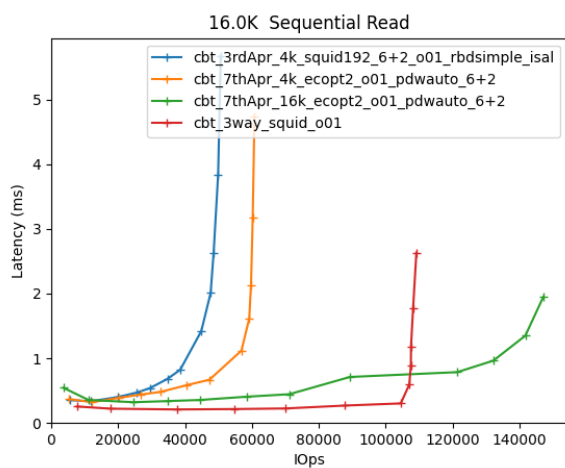| Sequential Write	cbt_3rdApr_4k_squid192	7thApr_4k_ecopt2_pdwauto6+2	% change	7thApr_16k_ecopt2_pdwauto6+2	% change	cbt_3way_squid_o01	% change
4.0K	97052@10.5ms	193342@5.3	99%	193937@5.3	100%	416200@2.5	329%
8.0K	117214@10.9ms	179162@7.1	53%	180908@7.1	54%	323164@4.0	176%
16.0K	50666@10.1ms	84656@6.0	67%	85000@6.0	68%	159631@3.2	215%
32.0K	49274@15.6ms	65321@11.7	33%	75548@10.1	53%	101547@7.5	106%
64.0K	2149@15.6ms	2452@13.7	14%	2699@12.4	26%	3093@5.4	44%
256.0K	2923@22.8ms	3191@20.9	9%	3389@19.7	16%	3914@17.0	34%
512.0K	3062@21.7ms	3339@19.9	9%	3559@18.6	16%	4002@4.0	31%
1024.0K	3948@42.0ms	4222@39.2	7%	4344@38.0	10%	3887@42.6	-2%

Random Read	cbt_3rdApr_4k_squid192	7thApr_4k_ecopt2_pdwauto6+2	% change	7thApr_16k_ecopt2_pdwauto6+2	% change	cbt_3way_squid_o01	% change
4.0K	38657@15.2ms	121380@6.3	214%	116479@6.6	201%	185151@4.1	379%
8.0K	36919@15.9ms	75969@10.1	106%	104740@7.3	184%	179076@4.3	385%
16.0K	36869@15.9ms	47707@12.3	29%	100563@3.8	173%	167479@3.5	354%
32.0K	34752@7.4ms	34276@7.5	-1%	63807@4.0	84%	134765@1.9	288%
64.0K	2135@7.8ms	2045@8.2	-4%	2665@6.3	25%	6965@2.4	226%
256.0K	4631@7.2ms	4768@7.0	3%	5239@6.4	13%	12889@2.6	178%
512.0K	6174@5.4ms	6107@5.5	-1%	6392@3.3	4%	12726@2.6	106%
1024.0K	6308@5.3ms	6609@5.1	5%	7218@4.6	14%	10172@3.3	61%

Comparison summary for cbt-3rdApr-4k-squid192-6+2-o01-rbdsimple-isal vs cbt-7thApr-4k-ecopt2-o01-pdwauto-6+2 vs cbt-7thApr-16k-ecopt2-o01-pdwauto-6+2 vs cbt-3way-squid-o01
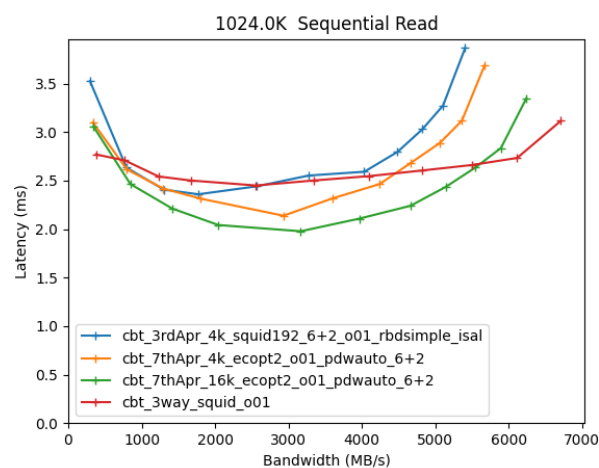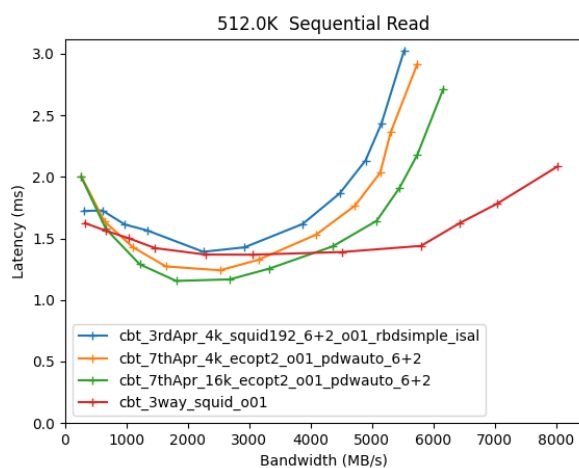
Random Write	cbt_3rdApr_4k	7thApr_4k	%change	7thApr_16k	%change	3way_squid	%change
4.0K	12902@59.5ms	24171@31.8	87%	23682@21.6	84%	49457@5.2	283%
8.0K	12643@60.7ms	21147@36.3	67%	22304@34.4	76%	51157@7.5	305%
16.0K	11848@43.2ms	16860@30.3	42%	20464@25.0	73%	50325@10.1	325%
32.0K	11463@44.6ms	13307@38.4	16%	17539@29.2	53%	46263@11.0	304%
64.0K	689@36.5ms	812@30.9	18%	880@28.6	28%	2507@10.0	264%
256.0K	2002@33.4ms	2206@30.3	10%	2315@28.8	16%	4185@7.9	109%
512.0K	2718@9.0ms	2999@10.9	10%	3052@10.7	12%	4324@3.7	59%
1024.0K	3502@13.9ms	3940@12.3	13%	4062@11.9	16%	4502@10.7	29%

Random Read/Write	cbt_3rdApr_4k	7thApr_4k	%change	7thApr_16k	%change	3way_squid	%change
4.0K_70/30	24691@15.5ms	52434@7.3	112%	48900@7.8	98%	103588@3.7	320%
16.0K_70/30	22661@11.3ms	30559@8.4	35%	41607@6.1	84%	93528@2.7	313%
64.0K_30/70	833@20.1ms	954@17.5	15%	1043@16.1	25%	3072@5.4	269%
64.0K_70/30	1315@12.7ms	1418@11.8	8%	1538@10.9	17%	4395@3.8	234%

Response Curves

Sequential Read

4.0K Sequential Read

Legend:
- cbt_3rdApr_4k_squid192_6+2_o01_rbdsimple_isal
- cbt_7thApr_4k_ecopt2_o01_pdwauto_6+2
- cbt_7thApr_16k_ecopt2_o01_pdwauto_6+2
- cbt_3way_squid_o01

8.0K Sequential Read

16.0K Sequential Read

32.0K Sequential Read

64.0K Sequential Read

256.0K Sequential Read

512.0K Sequential Read

1024.0K Sequential Read

Sequential Write

4.0K Sequential Write

8.0K Sequential Write

16.0K Sequential Write

32.0K Sequential Write

64.0K Sequential Write

256.0K Sequential Write

512.0K Sequential Write

1024.0K Sequential Write

Random Read
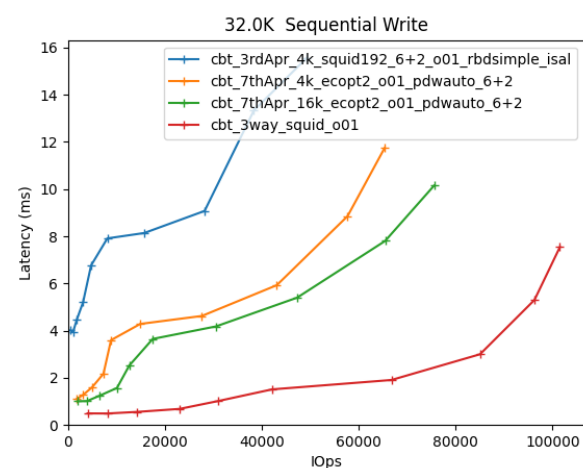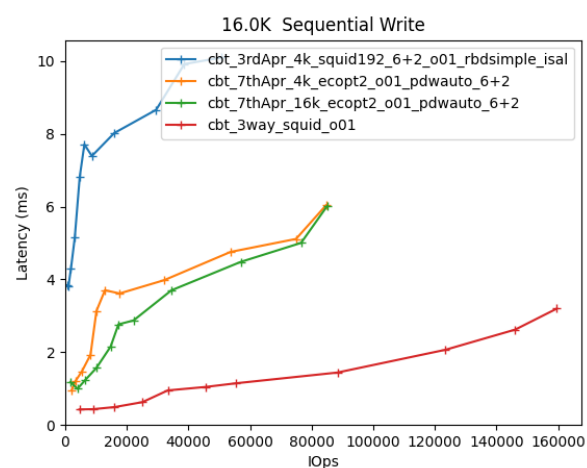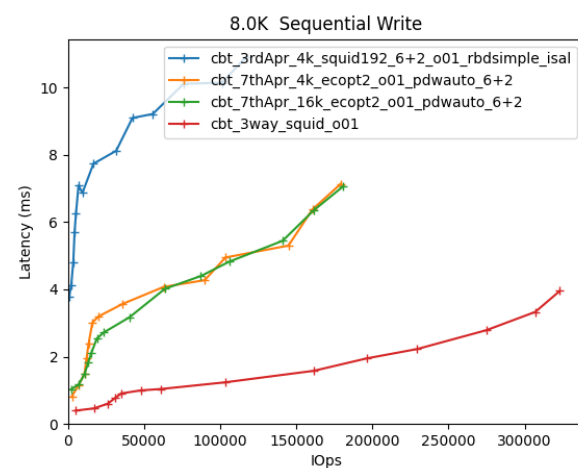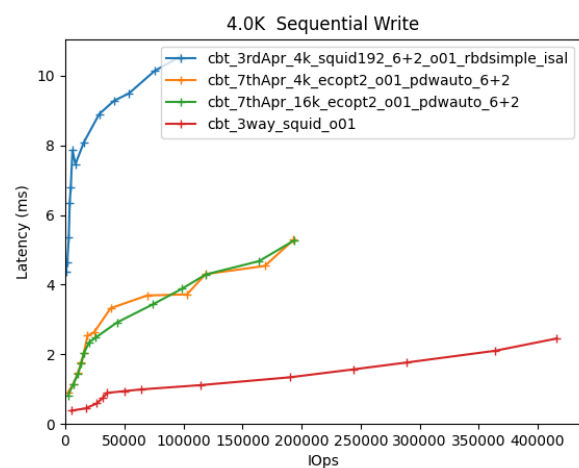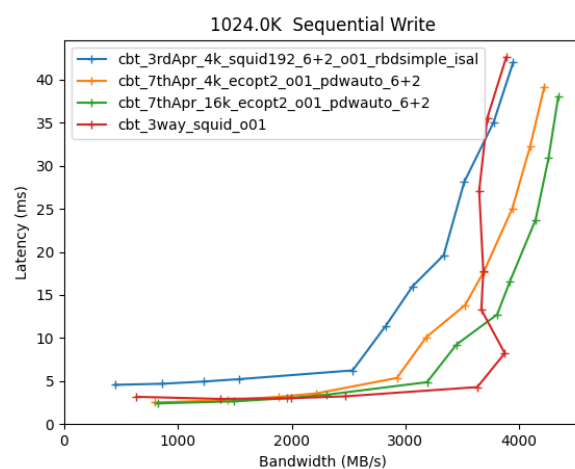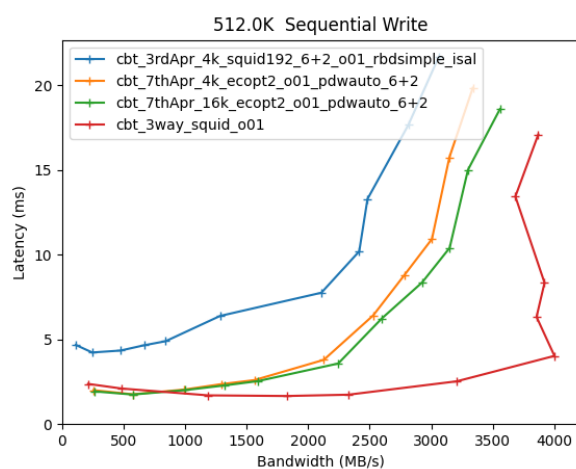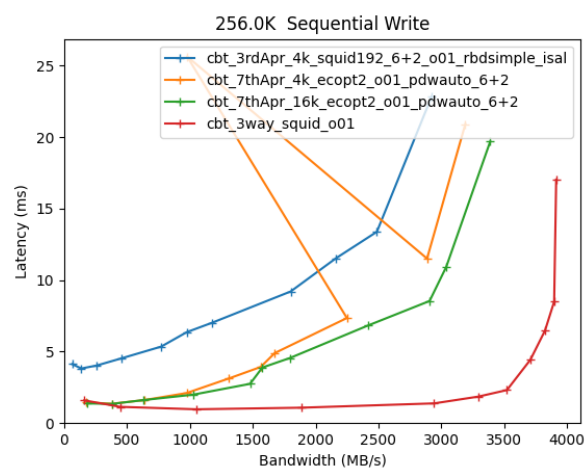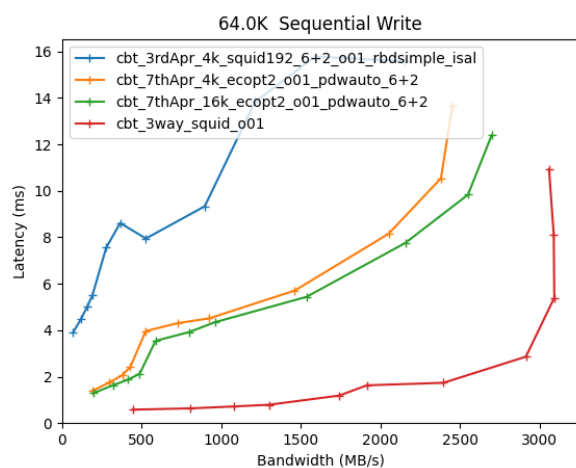
4.0K Random Read

8.0K Random Read

Random Write

4.0K Random Write

8.0K Random Write

16.0K Random Write

32.0K Random Write

64.0K Random Write

256.0K Random Write

512.0K Random Write
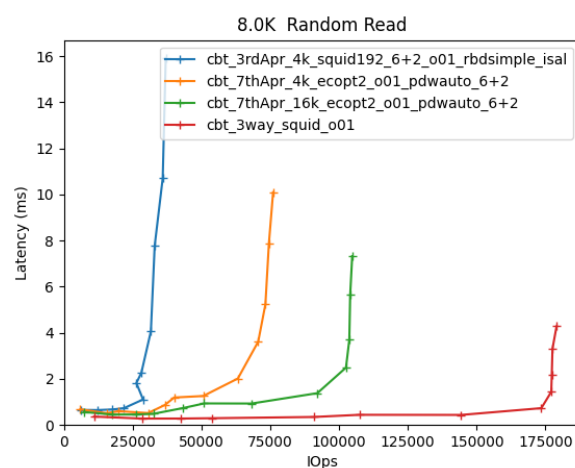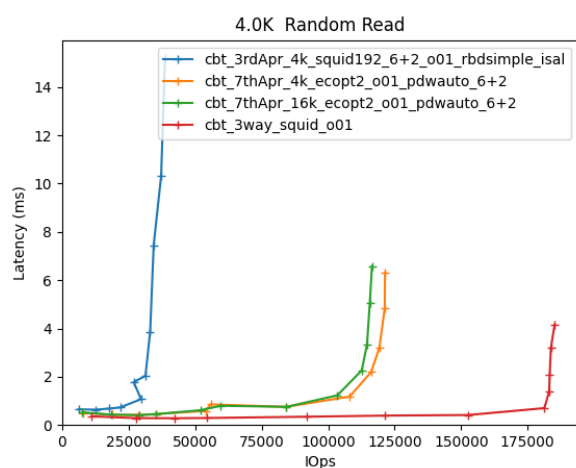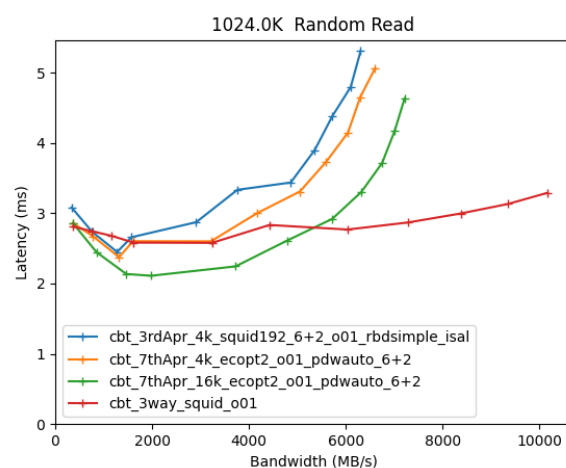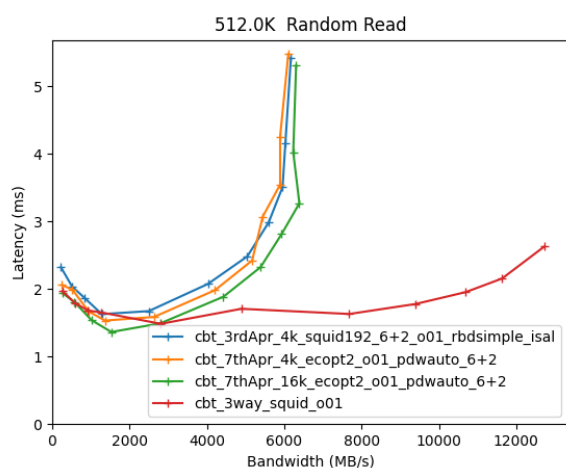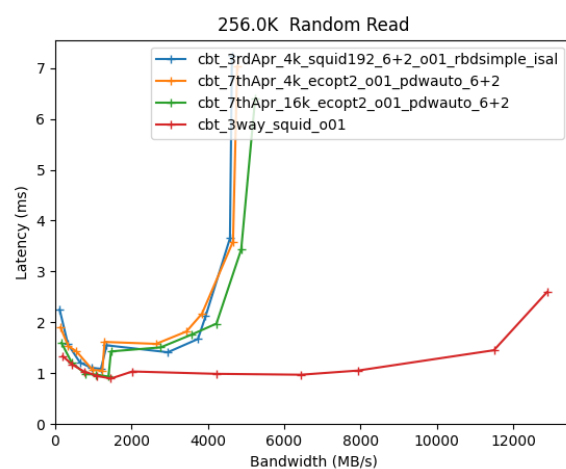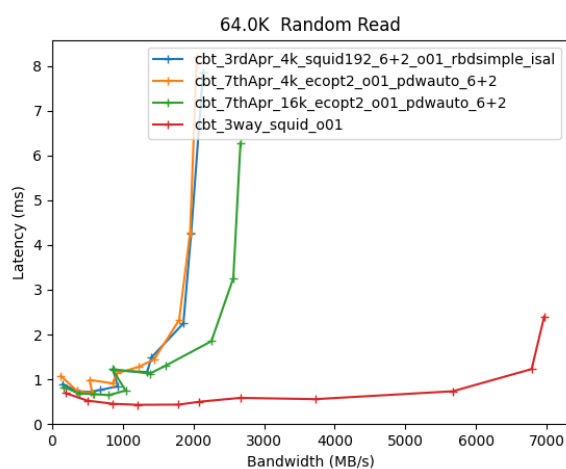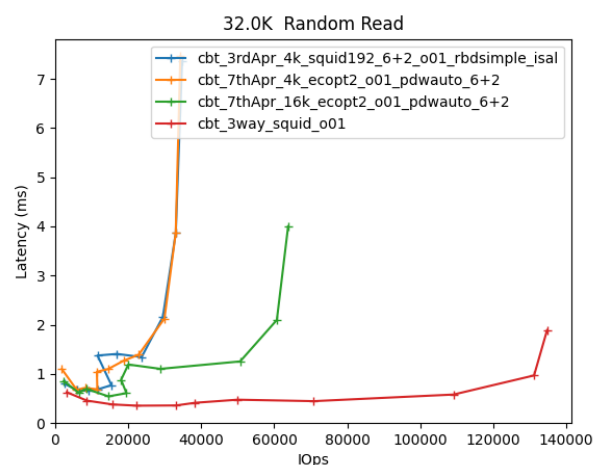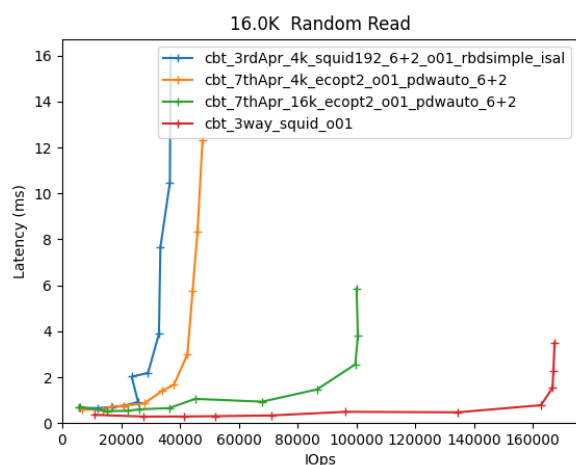
1024.0K Random Write

Random Read/Write

4.0K 70/30 Random Read/Write

16.0K 70/30 Random Read/Write

64.0K 30/70 Random Read/Write
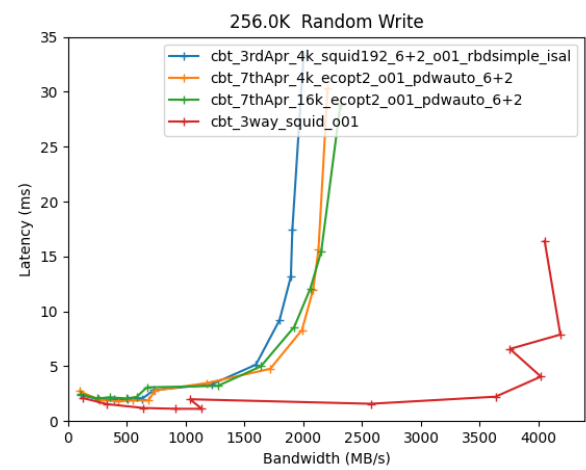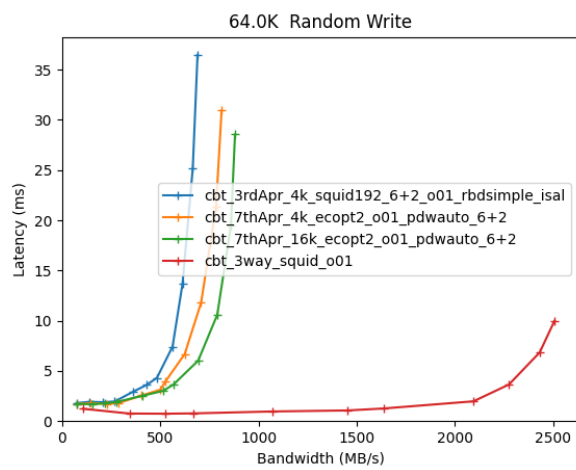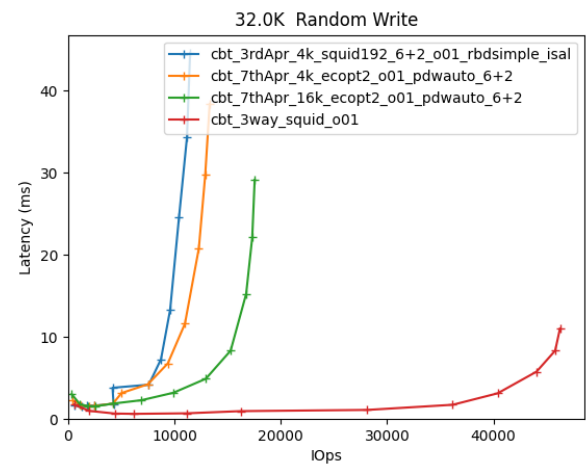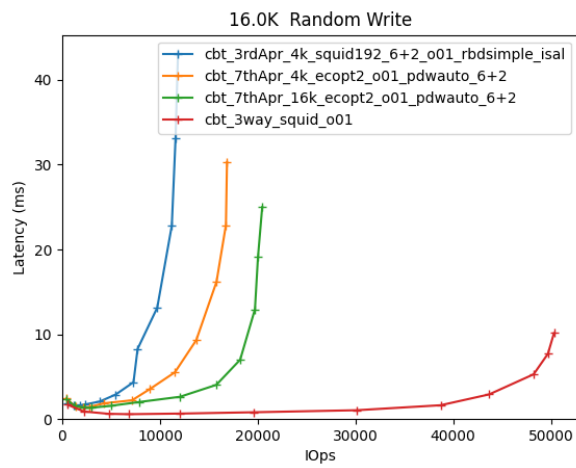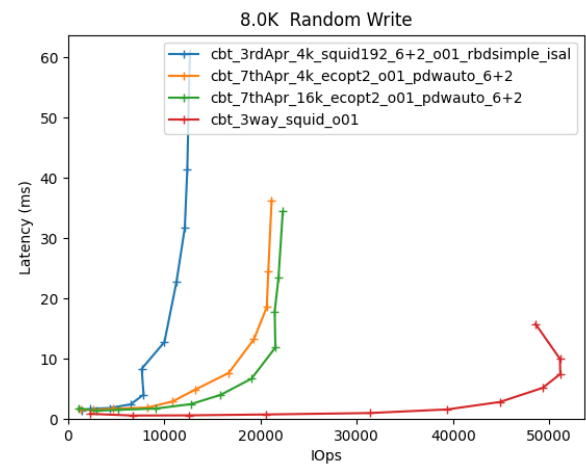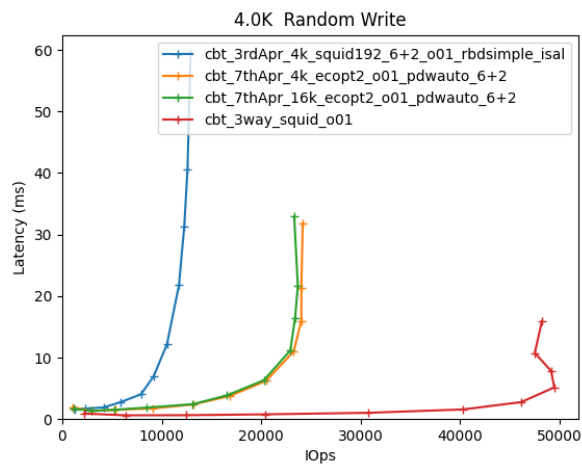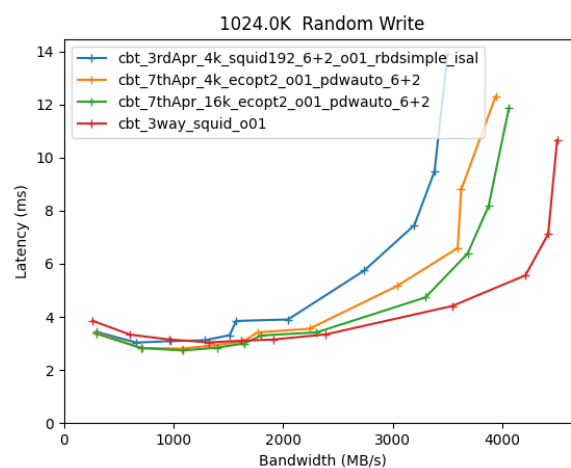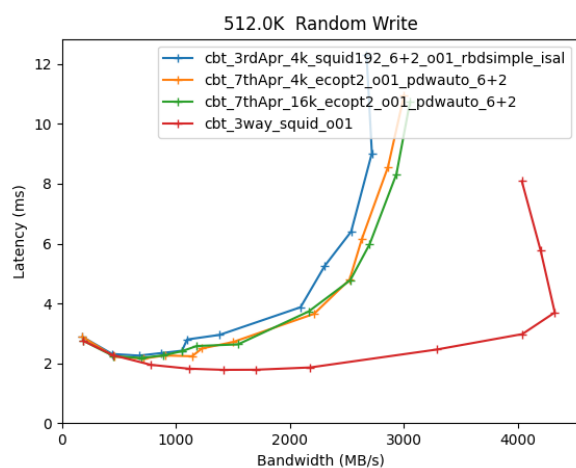
64.0K 70/30 Random Read/Write
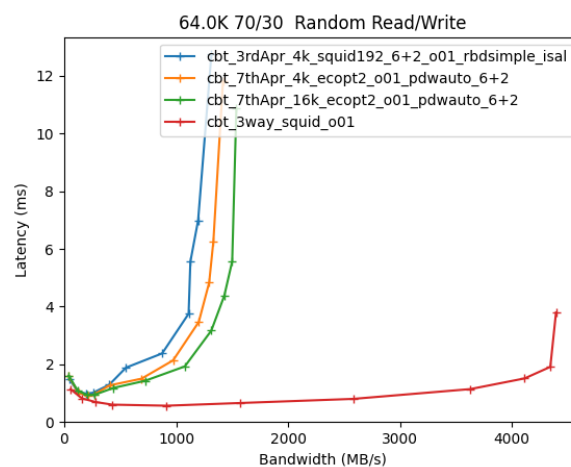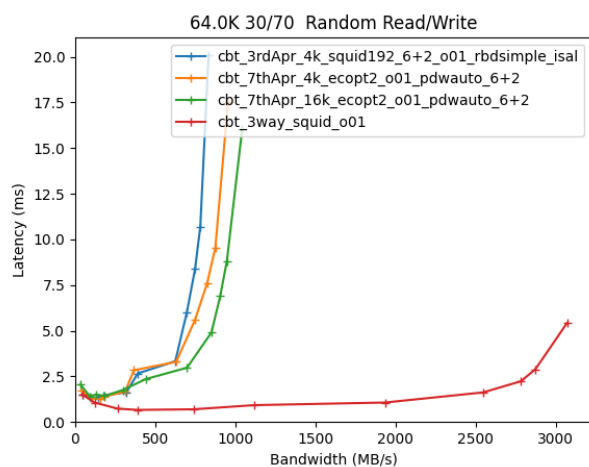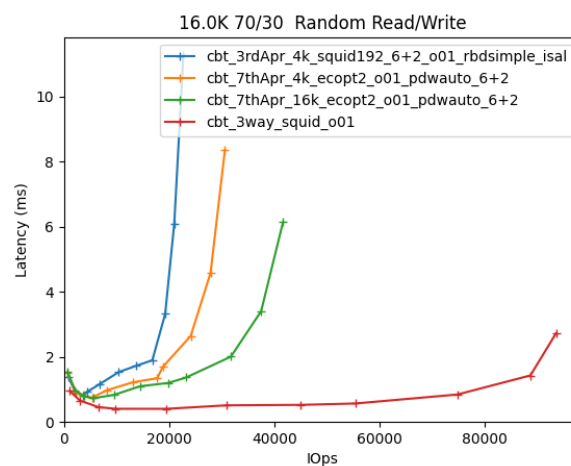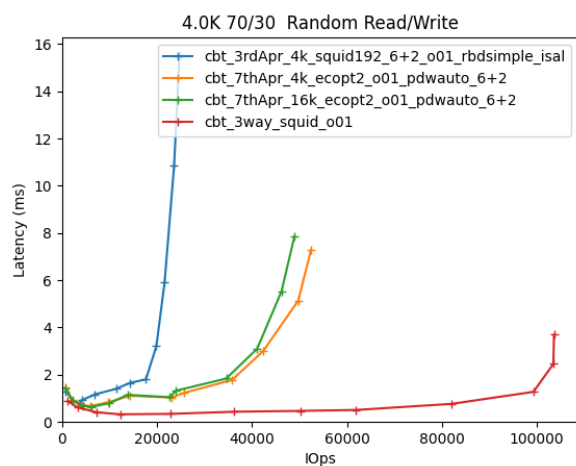
Configuration yaml files

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: 1368750
  volumes_per_client:
  - 16
  workloads:
    16k7030:
      jobname: randmix
      mode: randrw
      numjobs:
      - 1
      op_size: 16384
      rwmixread: 70
      total_iodepth:
      - 1
      - 2
      - 3
      - 4
      - 8
      - 16
      - 24
      - 32
      - 64
      - 128
      - 256
    16krandomread:
      jobname: randread
      mode: randread
      numjobs:
      - 1
      op_size: 16384
      total_iodepth:
      - 4
      - 8
      - 12
      - 16
      - 24
      - 48
      - 64
      - 128
      - 256
      - 384
      - 588
```

cbt-3rdApr-4k-squid192-6+2-o01-rbdsimple-isal vs cbt-7thApr-4k-ecopt2-o01-pdwauto-6+2 vs   July 22, 2025
cbt-7thApr-16k-ecopt2-o01-pdwauto-6+2 vs cbt-3way-squid-o01

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```
16krandomwrite:
  jobname: randwrite
  mode: randwrite
  numjobs:
  - 1
  op_size: 16384
  total_iodepth:
  - 1
  - 2
  - 3
  - 4
  - 8
  - 16
  - 32
  - 64
  - 128
  - 256
  - 384
  - 512
1Mrandomread:
  jobname: randread
  mode: randread
  numjobs:
  - 1
  op_size: 1048576
  total_iodepth:
  - 1
  - 2
  - 3
  - 4
  - 8
  - 12
  - 16
  - 20
  - 24
  - 28
  - 32
1Mrandomwrite:
  jobname: randwrite
  mode: randwrite
  numjobs:
  - 1
  op_size: 1048576
  total_iodepth:
  - 1
  - 2
  - 3
  - 4
  - 5
  - 6
  - 8
  - 16
  - 24
  - 32
  - 48
1Mseqread:
  jobname: seqread
  mode: read
  numjobs:
  - 1
  op_size: 1048576
  total_iodepth:
  - 1
```

```
        - 2
        - 3
        - 4
        - 6
        - 8
        - 10
        - 12
        - 14
        - 16
        - 20
    1Mseqwrite:
      jobname: seqwrite
      mode: write
      numjobs:
      - 1
      op_size: 1048576
      total_iodepth:
      - 2
      - 4
      - 6
      - 8
      - 16
      - 32
      - 48
      - 64
      - 96
      - 128
      - 160
    256krandomread:
      jobname: randread
      mode: randread
      numjobs:
      - 1
      op_size: 262144
      total_iodepth:
      - 1
      - 2
      - 3
      - 4
      - 5
      - 8
      - 16
      - 24
      - 32
      - 64
      - 128
    256krandomwrite:
      jobname: randwrite
      mode: randwrite
      numjobs:
      - 1
      op_size: 262144
      total_iodepth:
      - 1
      - 2
      - 3
      - 4
      - 5
      - 8
      - 16
      - 32
      - 64
      - 96
```

```
        - 128
        - 256
    32krandomread:
      jobname: randread
      mode: randread
      numjobs:
      - 1
      op_size: 32768
      total_iodepth:
      - 2
      - 4
      - 6
      - 8
      - 12
      - 16
      - 24
      - 32
      - 64
      - 128
      - 256
    32krandomwrite:
      jobname: randwrite
      mode: randwrite
      numjobs:
      - 1
      op_size: 32768
      total_iodepth:
      - 1
      - 2
      - 3
      - 4
      - 8
      - 16
      - 32
      - 64
      - 128
      - 256
      - 384
      - 512
    4k7030:
      jobname: randmix
      mode: randrw
      numjobs:
      - 1
      op_size: 4096
      rwmixread: 70
      total_iodepth:
      - 1
      - 2
      - 3
      - 4
      - 8
      - 16
      - 24
      - 32
      - 64
      - 128
      - 256
      - 384
    4krandomread:
      jobname: randread
      mode: randread
      numjobs:
```

```
        - 1
      op_size: 4096
      total_iodepth:
        - 4
        - 8
        - 12
        - 16
        - 32
        - 48
        - 64
        - 128
        - 256
        - 384
        - 588
    4krandomwrite:
      jobname: randwrite
      mode: randwrite
      numjobs:
        - 1
      op_size: 4096
      total_iodepth:
        - 2
        - 4
        - 8
        - 16
        - 32
        - 64
        - 128
        - 256
        - 384
        - 512
        - 768
    512krandomread:
      jobname: randread
      mode: randread
      numjobs:
        - 1
      op_size: 524288
      total_iodepth:
        - 1
        - 2
        - 3
        - 4
        - 8
        - 16
        - 24
        - 32
        - 40
        - 48
        - 64
    512krandomwrite:
      jobname: randwrite
      mode: randwrite
      numjobs:
        - 1
      op_size: 524288
      total_iodepth:
        - 1
        - 2
        - 3
        - 4
        - 5
        - 6
```

```
          - 8
          - 16
          - 24
          - 32
          - 48
          - 64
      512kseqread:
        jobname: seqread
        mode: read
        numjobs:
        - 1
        op_size: 524288
        total_iodepth:
        - 1
        - 2
        - 3
        - 4
        - 6
        - 8
        - 12
        - 16
        - 20
        - 24
        - 32
      512kseqwrite:
        jobname: seqwrite
        mode: write
        numjobs:
        - 1
        op_size: 524288
        total_iodepth:
        - 1
        - 2
        - 4
        - 6
        - 8
        - 16
        - 32
        - 48
        - 64
        - 96
        - 128
      64k3070:
        jobname: randmix
        mode: randrw
        numjobs:
        - 1
        op_size: 65536
        rwmixread: 30
        total_iodepth:
        - 1
        - 2
        - 3
        - 4
        - 8
        - 16
        - 32
        - 64
        - 96
        - 128
        - 256
      64k7030:
        jobname: randmix
```

```
    mode: randrw
    numjobs:
    - 1
    op_size: 65536
    rwmixread: 70
    total_iodepth:
    - 1
    - 2
    - 3
    - 4
    - 8
    - 16
    - 32
    - 64
    - 96
    - 128
    - 256
  64krandomread:
    jobname: randread
    mode: randread
    numjobs:
    - 1
    op_size: 65536
    total_iodepth:
    - 2
    - 4
    - 6
    - 8
    - 12
    - 16
    - 24
    - 32
    - 64
    - 128
    - 256
  64krandomwrite:
    jobname: randwrite
    mode: randwrite
    numjobs:
    - 1
    op_size: 65536
    total_iodepth:
    - 2
    - 4
    - 6
    - 8
    - 16
    - 24
    - 32
    - 64
    - 128
    - 256
    - 384
  64kseqread:
    jobname: read
    mode: read
    numjobs:
    - 1
    op_size: 65536
    total_iodepth:
    - 2
    - 4
    - 6
```

```
        - 8
        - 16
        - 24
        - 32
        - 64
        - 128
        - 192
        - 256
    64kseqwrite:
      jobname: write
      mode: write
      numjobs:
      - 1
      op_size: 65536
      total_iodepth:
      - 4
      - 8
      - 12
      - 16
      - 32
      - 48
      - 64
      - 128
      - 256
      - 384
      - 512
    8krandomread:
      jobname: randread
      mode: randread
      numjobs:
      - 1
      op_size: 8192
      total_iodepth:
      - 4
      - 8
      - 12
      - 16
      - 32
      - 48
      - 64
      - 128
      - 256
      - 384
      - 588
    8krandomwrite:
      jobname: randwrite
      mode: randwrite
      numjobs:
      - 1
      op_size: 8192
      total_iodepth:
      - 2
      - 4
      - 8
      - 16
      - 32
      - 64
      - 128
      - 256
      - 384
      - 512
      - 768
    precondition:
```

```
         jobname: precond1rw
         mode: randwrite
         monitor: false
         numjobs:
         - 1
         op_size: 65536
         time: 600
         total_iodepth:
         - 16
    seq16kread:
         jobname: seqread
         mode: read
         numjobs:
         - 1
         op_size: 16384
         total_iodepth:
         - 2
         - 4
         - 8
         - 12
         - 16
         - 24
         - 32
         - 64
         - 96
         - 128
         - 192
         - 288
    seq16kwrite:
         jobname: seqwrite
         mode: write
         numjobs:
         - 1
         op_size: 16384
         total_iodepth:
         - 2
         - 4
         - 8
         - 16
         - 32
         - 48
         - 64
         - 128
         - 256
         - 384
         - 512
    seq256kread:
         jobname: seqread
         mode: read
         numjobs:
         - 1
         op_size: 262144
         total_iodepth:
         - 1
         - 2
         - 3
         - 4
         - 5
         - 8
         - 16
         - 24
         - 32
         - 48
```

```
      - 64
    seq256kwrite:
      jobname: seqwrite
      mode: write
      numjobs:
      - 1
      op_size: 262144
      total_iodepth:
      - 1
      - 2
      - 4
      - 8
      - 16
      - 24
      - 32
      - 64
      - 96
      - 128
      - 256
    seq32kread:
      jobname: seqread
      mode: read
      numjobs:
      - 1
      op_size: 32768
      total_iodepth:
      - 2
      - 4
      - 8
      - 12
      - 16
      - 24
      - 32
      - 64
      - 96
      - 128
      - 192
    seq32kwrite:
      jobname: seqwrite
      mode: write
      numjobs:
      - 1
      op_size: 32768
      total_iodepth:
      - 2
      - 4
      - 8
      - 16
      - 32
      - 64
      - 128
      - 256
      - 512
      - 768
    seq4kread:
      jobname: seqread
      mode: read
      numjobs:
      - 1
      op_size: 4096
      total_iodepth:
      - 2
      - 4
```

```
        - 8
        - 12
        - 16
        - 24
        - 32
        - 64
        - 96
        - 128
        - 192
        - 288
    seq4kwrite:
      jobname: seqwrite
      mode: write
      numjobs:
      - 1
      op_size: 4096
      total_iodepth:
      - 2
      - 8
      - 16
      - 24
      - 32
      - 48
      - 64
      - 128
      - 256
      - 384
      - 512
      - 768
      - 1024
    seq8kread:
      jobname: seqread
      mode: read
      numjobs:
      - 1
      op_size: 8192
      total_iodepth:
      - 2
      - 4
      - 8
      - 12
      - 16
      - 24
      - 32
      - 64
      - 96
      - 128
      - 192
      - 288
    seq8kwrite:
      jobname: seqwrite
      mode: write
      numjobs:
      - 1
      op_size: 8192
      total_iodepth:
      - 2
      - 8
      - 16
      - 24
      - 32
      - 48
      - 64
```

```
            - 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: ljsanders
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: 1368750
```

```
   volumes_per_client:
   - 16
   workloads:
     16k7030:
       jobname: randmix
       mode: randrw
       numjobs:
       - 1
       op_size: 16384
       rwmixread: 70
       total_iodepth:
       - 1
       - 2
       - 3
       - 4
       - 8
       - 16
       - 24
       - 32
       - 64
       - 128
       - 256
     16krandomread:
       jobname: randread
       mode: randread
       numjobs:
       - 1
       op_size: 16384
       total_iodepth:
       - 4
       - 8
       - 12
       - 16
       - 24
       - 48
       - 64
       - 128
       - 256
       - 384
       - 588
     16krandomwrite:
       jobname: randwrite
       mode: randwrite
       numjobs:
       - 1
       op_size: 16384
       total_iodepth:
       - 1
       - 2
       - 3
       - 4
       - 8
       - 16
       - 32
       - 64
       - 128
       - 256
       - 384
       - 512
     1Mrandomread:
       jobname: randread
       mode: randread
       numjobs:
```

```
        - 1
        op_size: 1048576
        total_iodepth:
        - 1
        - 2
        - 3
        - 4
        - 8
        - 12
        - 16
        - 20
        - 24
        - 28
        - 32
    1Mrandomwrite:
        jobname: randwrite
        mode: randwrite
        numjobs:
        - 1
        op_size: 1048576
        total_iodepth:
        - 1
        - 2
        - 3
        - 4
        - 5
        - 6
        - 8
        - 16
        - 24
        - 32
        - 48
    1Mseqread:
        jobname: seqread
        mode: read
        numjobs:
        - 1
        op_size: 1048576
        total_iodepth:
        - 1
        - 2
        - 3
        - 4
        - 6
        - 8
        - 10
        - 12
        - 14
        - 16
        - 20
    1Mseqwrite:
        jobname: seqwrite
        mode: write
        numjobs:
        - 1
        op_size: 1048576
        total_iodepth:
        - 2
        - 4
        - 6
        - 8
        - 16
        - 32
```

```
        - 48
        - 64
        - 96
        - 128
        - 160
    256krandomread:
      jobname: randread
      mode: randread
      numjobs:
      - 1
      op_size: 262144
      total_iodepth:
      - 1
      - 2
      - 3
      - 4
      - 5
      - 8
      - 16
      - 24
      - 32
      - 64
      - 128
    256krandomwrite:
      jobname: randwrite
      mode: randwrite
      numjobs:
      - 1
      op_size: 262144
      total_iodepth:
      - 1
      - 2
      - 3
      - 4
      - 5
      - 8
      - 16
      - 32
      - 64
      - 96
      - 128
      - 256
    32krandomread:
      jobname: randread
      mode: randread
      numjobs:
      - 1
      op_size: 32768
      total_iodepth:
      - 2
      - 4
      - 6
      - 8
      - 12
      - 16
      - 24
      - 32
      - 64
      - 128
      - 256
    32krandomwrite:
      jobname: randwrite
      mode: randwrite
```

```
    numjobs:
    - 1
    op_size: 32768
    total_iodepth:
    - 1
    - 2
    - 3
    - 4
    - 8
    - 16
    - 32
    - 64
    - 128
    - 256
    - 384
    - 512
  4k7030:
    jobname: randmix
    mode: randrw
    numjobs:
    - 1
    op_size: 4096
    rwmixread: 70
    total_iodepth:
    - 1
    - 2
    - 3
    - 4
    - 8
    - 16
    - 24
    - 32
    - 64
    - 128
    - 256
    - 384
  4krandomread:
    jobname: randread
    mode: randread
    numjobs:
    - 1
    op_size: 4096
    total_iodepth:
    - 4
    - 8
    - 12
    - 16
    - 32
    - 48
    - 64
    - 128
    - 256
    - 384
    - 588
  4krandomwrite:
    jobname: randwrite
    mode: randwrite
    numjobs:
    - 1
    op_size: 4096
    total_iodepth:
    - 2
    - 4
```

```
                - 8
                - 16
                - 32
                - 64
                - 128
                - 256
                - 384
                - 512
                - 768
        512krandomread:
          jobname: randread
          mode: randread
          numjobs:
          - 1
          op_size: 524288
          total_iodepth:
          - 1
          - 2
          - 3
          - 4
          - 8
          - 16
          - 24
          - 32
          - 40
          - 48
          - 64
        512krandomwrite:
          jobname: randwrite
          mode: randwrite
          numjobs:
          - 1
          op_size: 524288
          total_iodepth:
          - 1
          - 2
          - 3
          - 4
          - 5
          - 6
          - 8
          - 16
          - 24
          - 32
          - 48
          - 64
        512kseqread:
          jobname: seqread
          mode: read
          numjobs:
          - 1
          op_size: 524288
          total_iodepth:
          - 1
          - 2
          - 3
          - 4
          - 6
          - 8
          - 12
          - 16
          - 20
          - 24
```

```
        - 32
    512kseqwrite:
      jobname: seqwrite
      mode: write
      numjobs:
      - 1
      op_size: 524288
      total_iodepth:
      - 1
      - 2
      - 4
      - 6
      - 8
      - 16
      - 32
      - 48
      - 64
      - 96
      - 128
    64k3070:
      jobname: randmix
      mode: randrw
      numjobs:
      - 1
      op_size: 65536
      rwmixread: 30
      total_iodepth:
      - 1
      - 2
      - 3
      - 4
      - 8
      - 16
      - 32
      - 64
      - 96
      - 128
      - 256
    64k7030:
      jobname: randmix
      mode: randrw
      numjobs:
      - 1
      op_size: 65536
      rwmixread: 70
      total_iodepth:
      - 1
      - 2
      - 3
      - 4
      - 8
      - 16
      - 32
      - 64
      - 96
      - 128
      - 256
    64krandomread:
      jobname: randread
      mode: randread
      numjobs:
      - 1
      op_size: 65536
```

cbt-3rdApr-4k-squid192-6+2-o01-rbdsimple-isal vs cbt-7thApr-4k-ecopt2-o01-pdwauto-6+2 vs   July 22, 2025
cbt-7thApr-16k-ecopt2-o01-pdwauto-6+2 vs cbt-3way-squid-o01

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```
        total_iodepth:
        - 2
        - 4
        - 6
        - 8
        - 12
        - 16
        - 24
        - 32
        - 64
        - 128
        - 256
    64krandomwrite:
      jobname: randwrite
      mode: randwrite
      numjobs:
      - 1
      op_size: 65536
      total_iodepth:
      - 2
      - 4
      - 6
      - 8
      - 16
      - 24
      - 32
      - 64
      - 128
      - 256
      - 384
    64kseqread:
      jobname: read
      mode: read
      numjobs:
      - 1
      op_size: 65536
      total_iodepth:
      - 2
      - 4
      - 6
      - 8
      - 16
      - 24
      - 32
      - 64
      - 128
      - 192
      - 256
    64kseqwrite:
      jobname: write
      mode: write
      numjobs:
      - 1
      op_size: 65536
      total_iodepth:
      - 4
      - 8
      - 12
      - 16
      - 32
      - 48
      - 64
      - 128
```

```
      - 256
      - 384
      - 512
    8krandomread:
      jobname: randread
      mode: randread
      numjobs:
      - 1
      op_size: 8192
      total_iodepth:
      - 4
      - 8
      - 12
      - 16
      - 32
      - 48
      - 64
      - 128
      - 256
      - 384
      - 588
    8krandomwrite:
      jobname: randwrite
      mode: randwrite
      numjobs:
      - 1
      op_size: 8192
      total_iodepth:
      - 2
      - 4
      - 8
      - 16
      - 32
      - 64
      - 128
      - 256
      - 384
      - 512
      - 768
    precondition:
      jobname: precond1rw
      mode: randwrite
      monitor: false
      numjobs:
      - 1
      op_size: 65536
      time: 600
      total_iodepth:
      - 16
    seq16kread:
      jobname: seqread
      mode: read
      numjobs:
      - 1
      op_size: 16384
      total_iodepth:
      - 2
      - 4
      - 8
      - 12
      - 16
      - 24
      - 32
```

```
        - 64
        - 96
        - 128
        - 192
        - 288
    seq16kwrite:
      jobname: seqwrite
      mode: write
      numjobs:
      - 1
      op_size: 16384
      total_iodepth:
      - 2
      - 4
      - 8
      - 16
      - 32
      - 48
      - 64
      - 128
      - 256
      - 384
      - 512
    seq256kread:
      jobname: seqread
      mode: read
      numjobs:
      - 1
      op_size: 262144
      total_iodepth:
      - 1
      - 2
      - 3
      - 4
      - 5
      - 8
      - 16
      - 24
      - 32
      - 48
      - 64
    seq256kwrite:
      jobname: seqwrite
      mode: write
      numjobs:
      - 1
      op_size: 262144
      total_iodepth:
      - 1
      - 2
      - 4
      - 8
      - 16
      - 24
      - 32
      - 64
      - 96
      - 128
      - 256
    seq32kread:
      jobname: seqread
      mode: read
      numjobs:
```

```
        - 1
        op_size: 32768
        total_iodepth:
        - 2
        - 4
        - 8
        - 12
        - 16
        - 24
        - 32
        - 64
        - 96
        - 128
        - 192
    seq32kwrite:
      jobname: seqwrite
      mode: write
      numjobs:
      - 1
      op_size: 32768
      total_iodepth:
      - 2
      - 4
      - 8
      - 16
      - 32
      - 64
      - 128
      - 256
      - 512
      - 768
    seq4kread:
      jobname: seqread
      mode: read
      numjobs:
      - 1
      op_size: 4096
      total_iodepth:
      - 2
      - 4
      - 8
      - 12
      - 16
      - 24
      - 32
      - 64
      - 96
      - 128
      - 192
      - 288
    seq4kwrite:
      jobname: seqwrite
      mode: write
      numjobs:
      - 1
      op_size: 4096
      total_iodepth:
      - 2
      - 8
      - 16
      - 24
      - 32
      - 48
```

```
          - 64
          - 128
          - 256
          - 384
          - 512
          - 768
          - 1024
      seq8kread:
        jobname: seqread
        mode: read
        numjobs:
        - 1
        op_size: 8192
        total_iodepth:
        - 2
        - 4
        - 8
        - 12
        - 16
        - 24
        - 32
        - 64
        - 96
        - 128
        - 192
        - 288
      seq8kwrite:
        jobname: seqwrite
        mode: write
        numjobs:
        - 1
        op_size: 8192
        total_iodepth:
        - 2
        - 8
        - 16
        - 24
        - 32
        - 48
        - 64
        - 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: ljsanders
monitoring_profiles:
  collectl:
    args: -c 18 -sCD -i 10 -P -oz -F0 --rawtoo --sep ";" -f {collectl_dir}
```