

```
Last login: Sat Apr  2 21:42:08 on ttys000
LinLindeMacBook-Pro:~ linlinding$ cd Documents/6700S/0Sproject/
installfile/PerfKitBenchmark-1.2.0
LinLindeMacBook-Pro:PerfKitBenchmark-1.2.0 linlinding$ ./pkb.py --
project=sage-potential-127001 --benchmarks=bonnie++ --machine_type=f1-
micro
2016-04-02 22:21:53,291 c28d102d MainThread INFO      Verbose logging
to: /var/folders/_8/p4b95h9j2tz63n0_z91c30w0000gn/T/
perfkitbenchmark/run_c28d102d/pkb.log
2016-04-02 22:21:53,292 c28d102d MainThread INFO
PerfKitBenchmark version: unknown
2016-04-02 22:21:53,428 c28d102d MainThread INFO      Flag values:
--machine_type=f1-micro
--project=sage-potential-127001
--benchmarks=bonnie++
2016-04-02 22:21:53,457 c28d102d MainThread bonnie++(1/1) INFO
Provisioning resources for benchmark bonnie++
2016-04-02 22:21:53,459 c28d102d Thread-1 bonnie++(1/1) INFO
Running: gcloud compute networks create pkb-network-c28d102d --format
json --quiet --project sage-potential-127001 --range 10.0.0.0/16
2016-04-02 22:22:22,631 c28d102d Thread-1 bonnie++(1/1) INFO
Running: gcloud compute networks describe pkb-network-c28d102d --
format json --quiet --project sage-potential-127001
2016-04-02 22:22:24,214 c28d102d Thread-1 bonnie++(1/1) INFO
Running: gcloud compute firewall-rules create default-internal-
c28d102d --format json --quiet --project sage-potential-127001 --allow
tcp:1-65535,udp:1-65535,icmp --network pkb-network-c28d102d --source-
ranges 10.0.0.0/16
2016-04-02 22:22:42,430 c28d102d Thread-1 bonnie++(1/1) INFO
Running: gcloud compute firewall-rules describe default-internal-
c28d102d --format json --quiet --project sage-potential-127001
2016-04-02 22:22:44,465 c28d102d Thread-6 bonnie++(1/1) INFO
Running: gcloud compute firewall-rules create perfkit-firewall-
c28d102d-22 --format json --quiet --project sage-potential-127001 --
allow tcp:22,udp:22 --network pkb-network-c28d102d
2016-04-02 22:23:02,701 c28d102d Thread-6 bonnie++(1/1) INFO
Running: gcloud compute firewall-rules describe perfkit-firewall-
c28d102d-22 --format json --quiet --project sage-potential-127001
2016-04-02 22:23:04,751 c28d102d Thread-6 bonnie++(1/1) INFO
Running: gcloud compute instances create pkb-c28d102d-0 --format json
--quiet --project sage-potential-127001 --zone us-central1-a --network
pkb-network-c28d102d --image ubuntu-14-04 --boot-disk-auto-delete --
boot-disk-size 10 --boot-disk-type pd-standard --machine-type f1-micro
--tags perfkitbenchmark --no-restart-on-failure --metadata-from-file
sshKeys=/var/folders/_8/p4b95h9j2tz63n0_z91c30w0000gn/T/
perfkitbenchmark/run_c28d102d/key-metadataaiDvE50 --metadata
owner=linlinding --maintenance-policy TERMINATE
2016-04-02 22:23:51,062 c28d102d Thread-6 bonnie++(1/1) INFO
Running: gcloud compute instances describe pkb-c28d102d-0 --format
json --quiet --project sage-potential-127001 --zone us-central1-a
```

2016-04-02 22:23:53,217 c28d102d Thread-6 bonnie++(1/1) INFO
Running: gcloud compute instances describe pkb-c28d102d-0 --format
json --quiet --project sage-potential-127001 --zone us-central1-a
2016-04-02 22:23:55,749 c28d102d Thread-6 bonnie++(1/1) INFO VM:
104.197.33.19
2016-04-02 22:23:55,749 c28d102d Thread-6 bonnie++(1/1) INFO
Waiting for boot completion.
2016-04-02 22:23:55,750 c28d102d Thread-6 bonnie++(1/1) INFO
Running: ssh -A -p 22 perfkit@104.197.33.19 -2 -o UserKnownHostsFile=/
dev/null -o StrictHostKeyChecking=no -o IdentitiesOnly=yes -o
PreferredAuthentications=publickey -o PasswordAuthentication=no -o
ConnectTimeout=5 -o GSSAPIAuthentication=no -o ServerAliveInterval=30
-o ServerAliveCountMax=10 -i /var/folders/_8/
p4b95h9j2tz63n0_z91c30w0000gn/T/perfkitbenchmark/run_c28d102d/
perfkitbenchmark_keyfile hostname
2016-04-02 22:24:02,476 c28d102d Thread-6 bonnie++(1/1) INFO
Running: gcloud compute instances add-metadata pkb-c28d102d-0 --format
json --quiet --project sage-potential-127001 --zone us-central1-a --
metadata benchmark_uid=bonnie++0,benchmark=bonnie+
+,perfkit_uuid=c116c414-342c-487e-86a0-3612c2b701c9
2016-04-02 22:24:16,959 c28d102d Thread-6 bonnie++(1/1) INFO
Running: gcloud compute disks create pkb-c28d102d-0-data-0-0 --format
json --quiet --project sage-potential-127001 --zone us-central1-a --
size 500 --type pd-standard
2016-04-02 22:24:26,879 c28d102d Thread-6 bonnie++(1/1) INFO
Running: gcloud compute disks describe pkb-c28d102d-0-data-0-0 --
format json --quiet --project sage-potential-127001 --zone us-
central1-a
2016-04-02 22:24:30,099 c28d102d Thread-6 bonnie++(1/1) INFO
Running: gcloud compute instances attach-disk pkb-c28d102d-0 --format
json --quiet --project sage-potential-127001 --zone us-central1-a --
device-name pkb-c28d102d-0-data-0-0 --disk pkb-c28d102d-0-data-0-0
2016-04-02 22:24:48,689 c28d102d Thread-6 bonnie++(1/1) INFO
Running: ssh -A -p 22 perfkit@104.197.33.19 -2 -o UserKnownHostsFile=/
dev/null -o StrictHostKeyChecking=no -o IdentitiesOnly=yes -o
PreferredAuthentications=publickey -o PasswordAuthentication=no -o
ConnectTimeout=5 -o GSSAPIAuthentication=no -o ServerAliveInterval=30
-o ServerAliveCountMax=10 -i /var/folders/_8/
p4b95h9j2tz63n0_z91c30w0000gn/T/perfkitbenchmark/run_c28d102d/
perfkitbenchmark_keyfile [[-d /mnt]] && sudo umount /mnt; sudo
mkfs -F -E lazy_itable_init=0,discard -O ^has_journal -t ext4 -b
4096 /dev/disk/by-id/google-pkb-c28d102d-0-data-0-0 2016-04-02
22:34:14,922 c28d102d Thread-6 bonnie++(1/1) INFO Running: ssh -A
-p 22 perfkit@104.197.33.19 -2 -o UserKnownHostsFile=/dev/null -o
StrictHostKeyChecking=no -o IdentitiesOnly=yes -o
PreferredAuthentications=publickey -o PasswordAuthentication=no -o
ConnectTimeout=5 -o GSSAPIAuthentication=no -o ServerAliveInterval=30
-o ServerAliveCountMax=10 -i /var/folders/_8/
p4b95h9j2tz63n0_z91c30w0000gn/T/perfkitbenchmark/run_c28d102d/
perfkitbenchmark_keyfile sudo mkdir -p /scratch;sudo mount -o

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discard /dev/disk/by-id/google-pkb-c28d102d-0-data-0-0 /scratch;sudo
chown -R $USER:$USER /scratch;
2016-04-02 22:34:17,365 c28d102d Thread-6 bonnie++(1/1) INFO
Running: ssh -A -p 22 perfkit@104.197.33.19 -2 -o UserKnownHostsFile=/
dev/null -o StrictHostKeyChecking=no -o IdentitiesOnly=yes -o
PreferredAuthentications=publickey -o PasswordAuthentication=no -o
ConnectTimeout=5 -o GSSAPIAuthentication=no -o ServerAliveInterval=30
-o ServerAliveCountMax=10 -i /var/folders/_8/
p4b95h9j2tzc63n0_z91c30w0000gn/T/perfkitbenchmark/run_c28d102d/
perfkitbenchmark_keyfile mkdir -p /tmp/pkb
2016-04-02 22:34:18,401 c28d102d MainThread bonnie++(1/1) INFO      ssh
to VMs in this benchmark by name with:
    ssh -F /var/folders/_8/p4b95h9j2tzc63n0_z91c30w0000gn/T/
perfkitbenchmark/run_c28d102d/ssh_config <vm_name>
    ssh -F /var/folders/_8/p4b95h9j2tzc63n0_z91c30w0000gn/T/
perfkitbenchmark/run_c28d102d/ssh_config vm<index>
    ssh -F /var/folders/_8/p4b95h9j2tzc63n0_z91c30w0000gn/T/
perfkitbenchmark/run_c28d102d/ssh_config <group_name>--<index>
2016-04-02 22:34:18,402 c28d102d MainThread bonnie++(1/1) INFO
Preparing benchmark bonnie++
2016-04-02 22:34:18,403 c28d102d MainThread bonnie++(1/1) INFO
Bonnie++ prepare on 104.197.33.19
2016-04-02 22:34:18,404 c28d102d MainThread bonnie++(1/1) INFO
Running: ssh -A -p 22 perfkit@104.197.33.19 -2 -o UserKnownHostsFile=/
dev/null -o StrictHostKeyChecking=no -o IdentitiesOnly=yes -o
PreferredAuthentications=publickey -o PasswordAuthentication=no -o
ConnectTimeout=5 -o GSSAPIAuthentication=no -o ServerAliveInterval=30
-o ServerAliveCountMax=10 -i /var/folders/_8/
p4b95h9j2tzc63n0_z91c30w0000gn/T/perfkitbenchmark/run_c28d102d/
perfkitbenchmark_keyfile sudo apt-get update
2016-04-02 22:35:08,542 c28d102d MainThread bonnie++(1/1) INFO
Running: ssh -A -p 22 perfkit@104.197.33.19 -2 -o UserKnownHostsFile=/
dev/null -o StrictHostKeyChecking=no -o IdentitiesOnly=yes -o
PreferredAuthentications=publickey -o PasswordAuthentication=no -o
ConnectTimeout=5 -o GSSAPIAuthentication=no -o ServerAliveInterval=30
-o ServerAliveCountMax=10 -i /var/folders/_8/
p4b95h9j2tzc63n0_z91c30w0000gn/T/perfkitbenchmark/run_c28d102d/
perfkitbenchmark_keyfile sudo DEBIAN_FRONTEND='noninteractive' /usr/
bin/apt-get -y install bonnie++
2016-04-02 22:35:35,526 c28d102d MainThread bonnie++(1/1) INFO
Running benchmark bonnie++
2016-04-02 22:35:35,527 c28d102d MainThread bonnie++(1/1) INFO
Bonnie++ running on 104.197.33.19
2016-04-02 22:35:35,527 c28d102d MainThread bonnie++(1/1) INFO
Running: ssh -A -p 22 perfkit@104.197.33.19 -2 -o UserKnownHostsFile=/
dev/null -o StrictHostKeyChecking=no -o IdentitiesOnly=yes -o
PreferredAuthentications=publickey -o PasswordAuthentication=no -o
ConnectTimeout=5 -o GSSAPIAuthentication=no -o ServerAliveInterval=30
-o ServerAliveCountMax=10 -i /var/folders/_8/
p4b95h9j2tzc63n0_z91c30w0000gn/T/perfkitbenchmark/run_c28d102d/

```

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perfkitbenchmark_keyfile cat /proc/meminfo | grep MemTotal | awk
'{print $2}'
2016-04-02 22:35:36,857 c28d102d MainThread bonnie++(1/1) INFO
Bonnie++ Results:
2016-04-02 22:35:36,858 c28d102d MainThread bonnie++(1/1) INFO
Running: ssh -A -p 22 perfkit@104.197.33.19 -2 -o UserKnownHostsFile=/
dev/null -o StrictHostKeyChecking=no -o IdentitiesOnly=yes -o
PreferredAuthentications=publickey -o PasswordAuthentication=no -o
ConnectTimeout=5 -o GSSAPIAuthentication=no -o ServerAliveInterval=30
-o ServerAliveCountMax=10 -i /var/folders/_8/
p4b95h9j2tzc63n0_z91c30w0000gn/T/perfkitbenchmark/run_c28d102d/
perfkitbenchmark_keyfile /usr/sbin/bonnie++ -q -d /scratch -s 1178 -
n 100 -f
2016-04-02 22:41:49,929 c28d102d MainThread bonnie++(1/1) INFO      Ran
ssh -A -p 22 perfkit@104.197.33.19 -2 -o UserKnownHostsFile=/dev/null
-o StrictHostKeyChecking=no -o IdentitiesOnly=yes -o
PreferredAuthentications=publickey -o PasswordAuthentication=no -o
ConnectTimeout=5 -o GSSAPIAuthentication=no -o ServerAliveInterval=30
-o ServerAliveCountMax=10 -i /var/folders/_8/
p4b95h9j2tzc63n0_z91c30w0000gn/T/perfkitbenchmark/run_c28d102d/
perfkitbenchmark_keyfile /usr/sbin/bonnie++ -q -d /scratch -s 1178 -
n 100 -f. Got return code (0).
STDOUT: 1.97,1.97,pkb-c28d102d-0,1,1459653476,1178M,,,,
16643,7,8519,4,,,19483,8,331.6,14,100,,,,,11164,71,67720,99,10055,74,2
353,94,103435,97,51167,33,,498ms,3794ms,,497ms,734ms,238ms,235ms,
236ms,253ms,225ms,504us

```

STDERR: Warning: Permanently added '104.197.33.19' (ECDSA) to the list of known hosts.

```

Version 1.97      -----Sequential Output----- --Sequential Input-
--Random-
Concurrency 1    -Per Chr- --Block-- -Rewrite- -Per Chr- --Block--
--Seeks--
Machine          Size K/sec %CP K/sec %CP K/sec %CP K/sec %CP K/sec
%CP /sec %CP
pkb-c28d102d- 1178M          16643 7 8519 4          19483 8
331.6 14
Latency          498ms 3794ms          497ms
734ms
Version 1.97      -----Sequential Create----- -----Random
Create-----
pkb-c28d102d-0 -Create-- --Read--- -Delete-- -Create-- --Read---
-Delete--
files /sec %CP /sec %CP /sec %CP /sec %CP /sec
%CP /sec %CP
100 11164 71 67720 99 10055 74 2353 94 103435 97
51167 33
Latency          238ms 235ms 236ms 253ms 225ms
504us

```

```

2016-04-02 22:41:49,934 c28d102d MainThread bonnie++(1/1) INFO
Cleaning up benchmark bonnie++
2016-04-02 22:41:49,934 c28d102d MainThread bonnie++(1/1) INFO
Tearing down resources for benchmark bonnie++
2016-04-02 22:41:49,934 c28d102d Thread-27 bonnie++(1/1) INFO
Running: gcloud compute instances delete pkb-c28d102d-0 --format json
--quiet --project sage-potential-127001 --zone us-central1-a
2016-04-02 22:42:55,869 c28d102d Thread-27 bonnie++(1/1) INFO
Running: gcloud compute instances describe pkb-c28d102d-0 --format
json --quiet --project sage-potential-127001 --zone us-central1-a
2016-04-02 22:42:57,816 c28d102d Thread-27 bonnie++(1/1) INFO
Running: gcloud compute disks delete pkb-c28d102d-0-data-0-0 --format
json --quiet --project sage-potential-127001 --zone us-central1-a
2016-04-02 22:43:06,522 c28d102d Thread-27 bonnie++(1/1) INFO
Running: gcloud compute disks describe pkb-c28d102d-0-data-0-0 --
format json --quiet --project sage-potential-127001 --zone us-
central1-a
2016-04-02 22:43:07,937 c28d102d MainThread bonnie++(1/1) INFO
Running: gcloud compute firewall-rules delete perfkit-firewall-
c28d102d-22 --format json --quiet --project sage-potential-127001
2016-04-02 22:43:30,031 c28d102d MainThread bonnie++(1/1) INFO
Running: gcloud compute firewall-rules describe perfkit-firewall-
c28d102d-22 --format json --quiet --project sage-potential-127001
2016-04-02 22:43:32,513 c28d102d MainThread bonnie++(1/1) INFO
Running: gcloud compute firewall-rules delete default-internal-
c28d102d --format json --quiet --project sage-potential-127001
2016-04-02 22:43:52,593 c28d102d MainThread bonnie++(1/1) INFO
Running: gcloud compute firewall-rules describe default-internal-
c28d102d --format json --quiet --project sage-potential-127001
2016-04-02 22:43:54,231 c28d102d MainThread bonnie++(1/1) INFO
Running: gcloud compute networks delete pkb-network-c28d102d --format
json --quiet --project sage-potential-127001
2016-04-02 22:44:22,878 c28d102d MainThread bonnie++(1/1) INFO
Running: gcloud compute networks describe pkb-network-c28d102d --
format json --quiet --project sage-potential-127001
2016-04-02 22:44:24,638 c28d102d MainThread INFO
-----PerfKitBenchmarker Complete

```

Results-----

```

{'metadata': {'bonnie_version': u'1.97',
              'cloud': 'GCP',
              'concurrency': u'1',
              'data_disk_0_legacy_disk_type': 'standard',
              'data_disk_0_media': 'hdd',
              'data_disk_0_num_stripes': 1,
              'data_disk_0_replication': 'zone',
              'data_disk_0_size': 500,
              'data_disk_0_type': 'pd-standard',
              'file_size': u'1178M',
              'format_version': u'1.97',
              'image': 'ubuntu-14-04',

```

data disk which can be used as
primary storage for virtual machine
instance

```
    'machine_type': 'f1-micro',
    'name': u'pkb-c28d102d-0',
    'num_files': u'100',
    'num_stripped_disks': 1,
    'perfkitbenchmarker_version': 'unknown',
    'preemptible': False,
    'scratch_disk_size': 500,
    'scratch_disk_type': 'standard',
    'seed': u'1459653476',
    'vm_count': 1,
    'zone': 'us-central1-a'},
'metric': 'put_block',
'official': False,
'owner': 'linlinding',
'product_name': 'PerfKitBenchmarker',
'run_uri': 'c116c414-342c-487e-86a0-3612c2b701c9',
'sample_uri': '20d69e0a-6dcb-49a4-ba19-ec06d46f5770',
'test': 'bonnie++',
'timestamp': 1459651309.930584,
'unit': 'K/sec',
'value': 16643.0}
{'metadata': {'bonnie_version': u'1.97',
              'cloud': 'GCP',
              'concurrency': u'1',
              'data_disk_0_legacy_disk_type': 'standard',
              'data_disk_0_media': 'hdd',
              'data_disk_0_num_stripes': 1,
              'data_disk_0_replication': 'zone',
              'data_disk_0_size': 500,
              'data_disk_0_type': 'pd-standard',
              'file_size': u'1178M',
              'format_version': u'1.97',
              'image': 'ubuntu-14-04',
              'machine_type': 'f1-micro',
              'name': u'pkb-c28d102d-0',
              'num_files': u'100',
              'num_stripped_disks': 1,
              'perfkitbenchmarker_version': 'unknown',
              'preemptible': False,
              'scratch_disk_size': 500,
              'scratch_disk_type': 'standard',
              'seed': u'1459653476',
              'vm_count': 1,
              'zone': 'us-central1-a'},
'metric': 'put_block_cpu',
'official': False,
'owner': 'linlinding',
'product_name': 'PerfKitBenchmarker',
'run_uri': 'c116c414-342c-487e-86a0-3612c2b701c9',
'sample_uri': '0ad8188b-244f-412d-912b-4f341bf8c2bf',
```

```
'test': 'bonnie++',
'timestamp': 1459651309.930605,
'unit': '%s',
'value': 7.0}
{'metadata': {'bonnie_version': u'1.97',
              'cloud': 'GCP',
              'concurrency': u'1',
              'data_disk_0_legacy_disk_type': 'standard',
              'data_disk_0_media': 'hdd',
              'data_disk_0_num_stripes': 1,
              'data_disk_0_replication': 'zone',
              'data_disk_0_size': 500,
              'data_disk_0_type': 'pd-standard',
              'file_size': u'1178M',
              'format_version': u'1.97',
              'image': 'ubuntu-14-04',
              'machine_type': 'f1-micro',
              'name': u'pkb-c28d102d-0',
              'num_files': u'100',
              'num_striped_disks': 1,
              'perfkitbenchmarker_version': 'unknown',
              'preemptible': False,
              'scratch_disk_size': 500,
              'scratch_disk_type': 'standard',
              'seed': u'1459653476',
              'vm_count': 1,
              'zone': 'us-central1-a'},
'metric': 'rewrite',
'official': False,
'owner': 'linlinding',
'product_name': 'PerfKitBenchmarker',
'run_uri': 'c116c414-342c-487e-86a0-3612c2b701c9',
'sample_uri': '4beb34ff-7e58-4358-8617-c82e45a8521f',
'test': 'bonnie++',
'timestamp': 1459651309.930612,
'unit': 'K/sec',
'value': 8519.0}
{'metadata': {'bonnie_version': u'1.97',
              'cloud': 'GCP',
              'concurrency': u'1',
              'data_disk_0_legacy_disk_type': 'standard',
              'data_disk_0_media': 'hdd',
              'data_disk_0_num_stripes': 1,
              'data_disk_0_replication': 'zone',
              'data_disk_0_size': 500,
              'data_disk_0_type': 'pd-standard',
              'file_size': u'1178M',
              'format_version': u'1.97',
              'image': 'ubuntu-14-04',
              'machine_type': 'f1-micro',
```

```

        'name': u'pkb-c28d102d-0',
        'num_files': u'100',
        'num_stripped_disks': 1,
        'perfkitbenchmarker_version': 'unknown',
        'preemptible': False,
        'scratch_disk_size': 500,
        'scratch_disk_type': 'standard',
        'seed': u'1459653476',
        'vm_count': 1,
        'zone': 'us-central1-a'},
    'metric': 'rewrite_cpu',
    'official': False,
    'owner': 'linlinding',
    'product_name': 'PerfKitBenchmarker',
    'run_uri': 'c116c414-342c-487e-86a0-3612c2b701c9',
    'sample_uri': '0fb454a5-9611-48a7-b4ba-17165b6e0caf',
    'test': 'bonnie++',
    'timestamp': 1459651309.930617,
    'unit': '%s',
    'value': 4.0}
{'metadata': {'bonnie_version': u'1.97',
              'cloud': 'GCP',
              'concurrency': u'1',
              'data_disk_0_legacy_disk_type': 'standard',
              'data_disk_0_media': 'hdd',
              'data_disk_0_num_stripes': 1,
              'data_disk_0_replication': 'zone',
              'data_disk_0_size': 500,
              'data_disk_0_type': 'pd-standard',
              'file_size': u'1178M',
              'format_version': u'1.97',
              'image': 'ubuntu-14-04',
              'machine_type': 'f1-micro',
              'name': u'pkb-c28d102d-0',
              'num_files': u'100',
              'num_stripped_disks': 1,
              'perfkitbenchmarker_version': 'unknown',
              'preemptible': False,
              'scratch_disk_size': 500,
              'scratch_disk_type': 'standard',
              'seed': u'1459653476',
              'vm_count': 1,
              'zone': 'us-central1-a'},
  'metric': 'get_block',
  'official': False,
  'owner': 'linlinding',
  'product_name': 'PerfKitBenchmarker',
  'run_uri': 'c116c414-342c-487e-86a0-3612c2b701c9',
  'sample_uri': '65a13cd5-a7e7-404c-9999-3d297a31aa7a',
  'test': 'bonnie++',

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```
'timestamp': 1459651309.930624,
'unit': 'K/sec',
'value': 19483.0}
{'metadata': {'bonnie_version': u'1.97',
              'cloud': 'GCP',
              'concurrency': u'1',
              'data_disk_0_legacy_disk_type': 'standard',
              'data_disk_0_media': 'hdd',
              'data_disk_0_num_stripes': 1,
              'data_disk_0_replication': 'zone',
              'data_disk_0_size': 500,
              'data_disk_0_type': 'pd-standard',
              'file_size': u'1178M',
              'format_version': u'1.97',
              'image': 'ubuntu-14-04',
              'machine_type': 'f1-micro',
              'name': u'pkb-c28d102d-0',
              'num_files': u'100',
              'num_striped_disks': 1,
              'perfkitbenchmarker_version': 'unknown',
              'preemptible': False,
              'scratch_disk_size': 500,
              'scratch_disk_type': 'standard',
              'seed': u'1459653476',
              'vm_count': 1,
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'metric': 'get_block_cpu',
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              'scratch_disk_type': 'standard',
              'seed': u'1459653476',
              'vm_count': 1,
              'zone': 'us-central1-a'},
'metric': 'get_block_latency',
'official': False,
'owner': 'linlinding',
'product_name': 'PerfKitBenchmark',
'run_uri': 'c116c414-342c-487e-86a0-3612c2b701c9',
'sample_uri': '921537ab-a52a-412a-a500-6eaa56ff2d00',
'test': 'bonnie++',
'timestamp': 1459651309.931194,
'unit': u'ms',
'value': 497.0}
{'metadata': {'bonnie_version': u'1.97',
              'cloud': 'GCP',
              'concurrency': u'1',

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        'data_disk_0_legacy_disk_type': 'standard',
        'data_disk_0_media': 'hdd',
        'data_disk_0_num_stripes': 1,
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        'data_disk_0_size': 500,
        'data_disk_0_type': 'pd-standard',
        'file_size': u'1178M',
        'format_version': u'1.97',
        'image': 'ubuntu-14-04',
        'machine_type': 'f1-micro',
        'name': u'pkb-c28d102d-0',
        'num_files': u'100',
        'num_stripped_disks': 1,
        'perfkitbenchmark_version': 'unknown',
        'preemptible': False,
        'scratch_disk_size': 500,
        'scratch_disk_type': 'standard',
        'seed': u'1459653476',
        'vm_count': 1,
        'zone': 'us-central1-a'},
    'metric': 'seeks_latency',
    'official': False,
    'owner': 'linlinding',
    'product_name': 'PerfKitBenchmark',
    'run_uri': 'c116c414-342c-487e-86a0-3612c2b701c9',
    'sample_uri': '51b09e23-83be-4382-b97d-1de51c29aa01',
    'test': 'bonnie++',
    'timestamp': 1459651309.9312,
    'unit': u'ms',
    'value': 734.0}
{'metadata': {'bonnie_version': u'1.97',
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              'concurrency': u'1',
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              'data_disk_0_num_stripes': 1,
              'data_disk_0_replication': 'zone',
              'data_disk_0_size': 500,
              'data_disk_0_type': 'pd-standard',
              'file_size': u'1178M',
              'format_version': u'1.97',
              'image': 'ubuntu-14-04',
              'machine_type': 'f1-micro',
              'name': u'pkb-c28d102d-0',
              'num_files': u'100',
              'num_stripped_disks': 1,
              'perfkitbenchmark_version': 'unknown',
              'preemptible': False,
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              'scratch_disk_type': 'standard',

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```

        'seed': u'1459653476',
        'vm_count': 1,
        'zone': 'us-central1-a'},
'metric': 'seq_create_latency',
'official': False,
'owner': 'linlinding',
'product_name': 'PerfKitBenchmark',
'run_uri': 'c116c414-342c-487e-86a0-3612c2b701c9',
'sample_uri': 'f4f4d27b-d781-4067-bbad-7915a1073928',
'test': 'bonnie++',
'timestamp': 1459651309.931206,
'unit': u'ms',
'value': 238.0}
{'metadata': {'bonnie_version': u'1.97',
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              'data_disk_0_num_stripes': 1,
              'data_disk_0_replication': 'zone',
              'data_disk_0_size': 500,
              'data_disk_0_type': 'pd-standard',
              'file_size': u'1178M',
              'format_version': u'1.97',
              'image': 'ubuntu-14-04',
              'machine_type': 'f1-micro',
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              'num_files': u'100',
              'num_striped_disks': 1,
              'perfkitbenchmark_version': 'unknown',
              'preemptible': False,
              'scratch_disk_size': 500,
              'scratch_disk_type': 'standard',
              'seed': u'1459653476',
              'vm_count': 1,
              'zone': 'us-central1-a'},
'metric': 'seq_stat_latency',
'official': False,
'owner': 'linlinding',
'product_name': 'PerfKitBenchmark',
'run_uri': 'c116c414-342c-487e-86a0-3612c2b701c9',
'sample_uri': '401fa943-c8cf-42ff-b78b-dd541f03816d',
'test': 'bonnie++',
'timestamp': 1459651309.931212,
'unit': u'ms',
'value': 235.0}
{'metadata': {'bonnie_version': u'1.97',
              'cloud': 'GCP',
              'concurrency': u'1',
              'data_disk_0_legacy_disk_type': 'standard',

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        'data_disk_0_media': 'hdd',
        'data_disk_0_num_stripes': 1,
        'data_disk_0_replication': 'zone',
        'data_disk_0_size': 500,
        'data_disk_0_type': 'pd-standard',
        'file_size': u'1178M',
        'format_version': u'1.97',
        'image': 'ubuntu-14-04',
        'machine_type': 'f1-micro',
        'name': u'pkb-c28d102d-0',
        'num_files': u'100',
        'num_stripped_disks': 1,
        'perfkitbenchmark_version': 'unknown',
        'preemptible': False,
        'scratch_disk_size': 500,
        'scratch_disk_type': 'standard',
        'seed': u'1459653476',
        'vm_count': 1,
        'zone': 'us-central1-a'},
    'metric': 'seq_del_latency',
    'official': False,
    'owner': 'linlinding',
    'product_name': 'PerfKitBenchmarker',
    'run_uri': 'c116c414-342c-487e-86a0-3612c2b701c9',
    'sample_uri': '402c8216-bb0e-41cd-9ea6-727e3659cd1b',
    'test': 'bonnie++',
    'timestamp': 1459651309.931217,
    'unit': u'ms',
    'value': 236.0}
{'metadata': {'bonnie_version': u'1.97',
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               'concurrency': u'1',
               'data_disk_0_legacy_disk_type': 'standard',
               'data_disk_0_media': 'hdd',
               'data_disk_0_num_stripes': 1,
               'data_disk_0_replication': 'zone',
               'data_disk_0_size': 500,
               'data_disk_0_type': 'pd-standard',
               'file_size': u'1178M',
               'format_version': u'1.97',
               'image': 'ubuntu-14-04',
               'machine_type': 'f1-micro',
               'name': u'pkb-c28d102d-0',
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               'num_stripped_disks': 1,
               'perfkitbenchmark_version': 'unknown',
               'preemptible': False,
               'scratch_disk_size': 500,
               'scratch_disk_type': 'standard',
               'seed': u'1459653476',

```

```

        'vm_count': 1,
        'zone': 'us-central1-a'},
'metric': 'ran_create_latency',
'official': False,
'owner': 'linlinding',
'product_name': 'PerfKitBenchmark',
'run_uri': 'c116c414-342c-487e-86a0-3612c2b701c9',
'sample_uri': '6f2ae425-b792-4cb4-80e5-aa89c5d825e7',
'test': 'bonnie++',
'timestamp': 1459651309.931223,
'unit': u'ms',
'value': 253.0}
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              'concurrency': u'1',
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              'data_disk_0_media': 'hdd',
              'data_disk_0_num_stripes': 1,
              'data_disk_0_replication': 'zone',
              'data_disk_0_size': 500,
              'data_disk_0_type': 'pd-standard',
              'file_size': u'1178M',
              'format_version': u'1.97',
              'image': 'ubuntu-14-04',
              'machine_type': 'f1-micro',
              'name': u'pkb-c28d102d-0',
              'num_files': u'100',
              'num_striped_disks': 1,
              'perfkitbenchmark_version': 'unknown',
              'preemptible': False,
              'scratch_disk_size': 500,
              'scratch_disk_type': 'standard',
              'seed': u'1459653476',
              'vm_count': 1,
              'zone': 'us-central1-a'},
'metric': 'ran_stat_latency',
'official': False,
'owner': 'linlinding',
'product_name': 'PerfKitBenchmark',
'run_uri': 'c116c414-342c-487e-86a0-3612c2b701c9',
'sample_uri': '60d230dc-9a23-444a-8996-8e8bd44afca7',
'test': 'bonnie++',
'timestamp': 1459651309.931229,
'unit': u'ms',
'value': 225.0}
{'metadata': {'bonnie_version': u'1.97',
              'cloud': 'GCP',
              'concurrency': u'1',
              'data_disk_0_legacy_disk_type': 'standard',
              'data_disk_0_media': 'hdd',

```



```

        'data_disk_0_num_stripes': 1,
        'data_disk_0_replication': 'zone',
        'data_disk_0_size': 500,
        'data_disk_0_type': 'pd-standard',
        'file_size': u'1178M',
        'format_version': u'1.97',
        'image': 'ubuntu-14-04',
        'machine_type': 'f1-micro',
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        'num_files': u'100',
        'num_striped_disks': 1,
        'perfkitbenchmark_version': 'unknown',
        'preemptible': False,
        'scratch_disk_size': 500,
        'scratch_disk_type': 'standard',
        'seed': u'1459653476',
        'vm_count': 1,
        'zone': 'us-central1-a'},
    'metric': 'ran_del_latency',
    'official': False,
    'owner': 'linlinding',
    'product_name': 'PerfKitBenchmarker',
    'run_uri': 'c116c414-342c-487e-86a0-3612c2b701c9',
    'sample_uri': 'fdd23b06-4d27-4ec3-8316-4516925490aa',
    'test': 'bonnie++',
    'timestamp': 1459651309.931234,
    'unit': u'us',
    'value': 504.0}
{'metadata': {'cloud': 'GCP',
              'data_disk_0_legacy_disk_type': 'standard',
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              'data_disk_0_num_stripes': 1,
              'data_disk_0_replication': 'zone',
              'data_disk_0_size': 500,
              'data_disk_0_type': 'pd-standard',
              'image': 'ubuntu-14-04',
              'machine_type': 'f1-micro',
              'num_striped_disks': 1,
              'perfkitbenchmark_version': 'unknown',
              'preemptible': False,
              'scratch_disk_size': 500,
              'scratch_disk_type': 'standard',
              'vm_count': 1,
              'zone': 'us-central1-a'},
  'metric': 'End to End Runtime',
  'official': False,
  'owner': 'linlinding',
  'product_name': 'PerfKitBenchmarker',
  'run_uri': 'c116c414-342c-487e-86a0-3612c2b701c9',
  'sample_uri': 'a481b49a-01f8-4a98-a602-b6fe1c3efe3a',

```

```
'test': 'bonnie++',
'timestamp': 1459651464.602857,
'unit': 'seconds',
'value': 1351.145653963089}
```

-----PerfKitBenchmark Results

Summary-----

BONNIE++:

bonnie_version="1.97" concurrency="1" file_size="1178M"
format_version="1.97" name="pkb-c28d102d-0" num_files="100"
seed="1459653476"

put_block	16643.000000	K/sec
put_block_cpu	7.000000	%s
rewrite	8519.000000	K/sec
rewrite_cpu	4.000000	%s
get_block	19483.000000	K/sec
get_block_cpu	8.000000	%s
seeks	331.600000	K/sec
seeks_cpu	14.000000	%s
seq_create	11164.000000	K/sec
seq_create_cpu	71.000000	%s
seq_stat	67720.000000	K/sec
seq_stat_cpu	99.000000	%s
seq_del	10055.000000	K/sec
seq_del_cpu	74.000000	%s
ran_create	2353.000000	K/sec
ran_create_cpu	94.000000	%s
ran_stat	103435.000000	K/sec
ran_stat_cpu	97.000000	%s
ran_del	51167.000000	K/sec
ran_del_cpu	33.000000	%s
put_block_latency	498.000000	ms
rewrite_latency	3794.000000	ms
get_block_latency	497.000000	ms
seeks_latency	734.000000	ms
seq_create_latency	238.000000	ms
seq_stat_latency	235.000000	ms
seq_del_latency	236.000000	ms
ran_create_latency	253.000000	ms
ran_stat_latency	225.000000	ms
ran_del_latency	504.000000	us
End to End Runtime	1351.145654	seconds

For all tests: cloud="GCP" data_disk_0_legacy_disk_type="standard"
data_disk_0_media="hdd" data_disk_0_num_stripes="1"
data_disk_0_replication="zone" data_disk_0_size="500"
data_disk_0_type="pd-standard" image="ubuntu-14-04" machine_type="f1-
micro" num_striped_disks="1" perfkitbenchmarker_version="unknown"

```
preemptible="False" scratch_disk_size="500"
scratch_disk_type="standard" vm_count="1" zone="us-central1-a"
2016-04-02 22:44:24,643 c28d102d MainThread INFO      Publishing 31
samples to /var/folders/_8/p4b95h9j2tzc63n0_z91c30w0000gn/T/
perfkitbenchmark/run_c28d102d/perfkitbenchmark_results.json
2016-04-02 22:44:24,644 c28d102d MainThread INFO      Benchmark run
statuses:
```

```
-----
Name      UID      Status
-----
bonnie++  bonnie++0  SUCCEEDED
-----
```

```
Success rate: 100.00% (1/1)
2016-04-02 22:44:24,644 c28d102d MainThread INFO      Complete logs can
be found at: /var/folders/_8/p4b95h9j2tzc63n0_z91c30w0000gn/T/
perfkitbenchmark/run_c28d102d/pkb.log
LinLindeMacBook-Pro:PerfKitBenchmark-1.2.0 linlinding$
```