```
Last login: Wed Apr 13 19:50:34 on ttys000
1x-nat-vl932-172-30-211-109:~ lichaozhang$ cd Desktop/
PerfKitBenchmarker
1x-nat-vl932-172-30-211-109:PerfKitBenchmarker lichaozhang$ ./pkb.py
--project=practical-bot-127123 --benchmarks=coremark --
machine type=n1-standard-4
2016-04-13 19:58:09,516 c4f972ec MainThread INFO
                                                     Verbose logging
to: /var/folders/fg/r7tm6d814zb g hgm0rndsz40000gn/T/
perfkitbenchmarker/run_c4f972ec/pkb.log
2016-04-13 19:58:09,517 c4f972ec MainThread INFO
PerfKitBenchmarker version: unknown
2016-04-13 19:58:09,553 c4f972ec MainThread INFO
                                                     Flag values:
--machine_type=n1-standard-4
--project=practical-bot-127123
--benchmarks=coremark
2016-04-13 19:58:09,581 c4f972ec MainThread coremark(1/1) INFO
Provisioning resources for benchmark coremark
2016-04-13 19:58:09,583 c4f972ec Thread-1 coremark(1/1) INFO
Running: gcloud compute networks create pkb-network-c4f972ec --format
ison --quiet --project practical-bot-127123 --range 10.0.0.0/16
2016-04-13 19:58:43,953 c4f972ec Thread-1 coremark(1/1) INFO
Running: gcloud compute networks describe pkb-network-c4f972ec --
format json --quiet --project practical-bot-127123
2016-04-13 19:58:45,164 c4f972ec Thread-1 coremark(1/1) INFO
Running: gcloud compute firewall-rules create default-internal-
c4f972ec --format json --quiet --project practical-bot-127123 --allow
tcp:1-65535,udp:1-65535,icmp --network pkb-network-c4f972ec --source-
ranges 10.0.0.0/16
2016-04-13 19:59:03,138 c4f972ec Thread-1 coremark(1/1) INFO
Running: gcloud compute firewall-rules describe default-internal-
c4f972ec --format json --quiet --project practical-bot-127123
2016-04-13 19:59:04,410 c4f972ec Thread-6 coremark(1/1) INFO
Running: gcloud compute firewall-rules create perfkit-firewall-
c4f972ec-22 --format json --quiet --project practical-bot-127123 --
allow tcp:22,udp:22 --network pkb-network-c4f972ec
2016-04-13 19:59:27,831 c4f972ec Thread-6 coremark(1/1) INFO
Running: gcloud compute firewall-rules describe perfkit-firewall-
c4f972ec-22 --format json --quiet --project practical-bot-127123
2016-04-13 19:59:29,047 c4f972ec Thread-6 coremark(1/1) INFO
Running: gcloud compute instances create pkb-c4f972ec-0 --format json
--quiet --project practical-bot-127123 --zone us-central1-a --network
pkb-network-c4f972ec --image ubuntu-14-04 --boot-disk-auto-delete --
boot-disk-size 10 --boot-disk-type pd-standard --machine-type n1-
standard-4 --tags perfkitbenchmarker --no-restart-on-failure --
metadata-from-file sshKeys=/var/folders/fg/
r7tm6d814zb_g_hqm0rndsz40000gn/T/perfkitbenchmarker/run_c4f972ec/key-
metadataOpUEGK --metadata owner=lichaozhang --maintenance-policy
TERMINATE
2016-04-13 19:59:58,907 c4f972ec Thread-6 coremark(1/1) INFO
Running: gcloud compute instances describe pkb-c4f972ec-0 --format
```

```
json --quiet --project practical-bot-127123 --zone us-central1-a
2016-04-13 20:00:00,515 c4f972ec Thread-6 coremark(1/1) INFO
Running: gcloud compute instances describe pkb-c4f972ec-0 --format
json --quiet --project practical-bot-127123 --zone us-central1-a
2016-04-13 20:00:01,761 c4f972ec Thread-6 coremark(1/1) INFO
                                                                  VM:
23.251.148.129
2016-04-13 20:00:01,761 c4f972ec Thread-6 coremark(1/1) INFO
Waiting for boot completion.
2016-04-13 20:00:01,762 c4f972ec Thread-6 coremark(1/1) INFO
Running: ssh -A -p 22 perfkit@23.251.148.129 -2 -o
UserKnownHostsFile=/dev/null -o StrictHostKevChecking=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/fg/
r7tm6d814zb_g_hgm0rndsz40000gn/T/perfkitbenchmarker/run_c4f972ec/
perfkitbenchmarker keyfile hostname
2016-04-13 20:00:06,802 c4f972ec Thread-6 coremark(1/1) INFO
Running: ssh -A -p 22 perfkit@23.251.148.129 -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/fg/
r7tm6d814zb_g_hgm0rndsz40000gn/T/perfkitbenchmarker/run_c4f972ec/
perfkitbenchmarker_keyfile hostname
2016-04-13 20:00:07,602 c4f972ec Thread-6 coremark(1/1) INFO
Running: ssh -A -p 22 perfkit@23.251.148.129 -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/fg/
r7tm6d814zb g hgm0rndsz40000gn/T/perfkitbenchmarker/run c4f972ec/
perfkitbenchmarker keyfile hostname
2016-04-13 20:00:08,230 c4f972ec Thread-6 coremark(1/1) INFO
Running: ssh -A -p 22 perfkit@23.251.148.129 -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/fg/
r7tm6d814zb g hgm0rndsz40000gn/T/perfkitbenchmarker/run c4f972ec/
perfkitbenchmarker keyfile hostname
2016-04-13 20:00:09,252 c4f972ec Thread-6 coremark(1/1) INFO
Running: ssh -A -p 22 perfkit@23.251.148.129 -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/fg/
r7tm6d814zb g hgm0rndsz40000gn/T/perfkitbenchmarker/run c4f972ec/
perfkitbenchmarker_keyfile hostname
2016-04-13 20:00:10,175 c4f972ec Thread-6 coremark(1/1) INFO
Running: ssh -A -p 22 perfkit@23.251.148.129 -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/fg/
r7tm6d814zb g hgm0rndsz40000gn/T/perfkitbenchmarker/run c4f972ec/
perfkitbenchmarker_keyfile hostname
2016-04-13 20:00:11,050 c4f972ec Thread-6 coremark(1/1) INFO
Running: ssh -A -p 22 perfkit@23.251.148.129 -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/fg/
r7tm6d814zb g hgm0rndsz40000gn/T/perfkitbenchmarker/run c4f972ec/
perfkitbenchmarker_keyfile hostname
2016-04-13 20:00:14,566 c4f972ec Thread-6 coremark(1/1) INFO
Running: gcloud compute instances add-metadata pkb-c4f972ec-0 --format
json --quiet --project practical-bot-127123 --zone us-central1-a --
metadata
benchmark_uid=coremark0,benchmark=coremark,perfkit_uuid=02081cb2-
bc48-4c31-a82c-0ebd89037581
2016-04-13 20:00:23,740 c4f972ec Thread-6 coremark(1/1) INFO
Running: ssh -A -p 22 perfkit@23.251.148.129 -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/fg/
r7tm6d814zb g hgm0rndsz40000gn/T/perfkitbenchmarker/run c4f972ec/
perfkitbenchmarker keyfile mkdir -p /tmp/pkb
2016-04-13 20:00:24,412 c4f972ec MainThread coremark(1/1) INFO
                                                                   ssh
to VMs in this benchmark by name with:
  ssh -F /var/folders/fg/r7tm6d814zb g hgm0rndsz40000gn/T/
perfkitbenchmarker/run c4f972ec/ssh config <vm name>
  ssh -F /var/folders/fg/r7tm6d814zb g hgm0rndsz40000gn/T/
perfkitbenchmarker/run c4f972ec/ssh config vm<index>
  ssh -F /var/folders/fg/r7tm6d814zb g hgm0rndsz40000gn/T/
perfkitbenchmarker/run c4f972ec/ssh config <group name>-<index>
2016-04-13 20:00:24,414 c4f972ec MainThread coremark(1/1) INFO
Preparing benchmark coremark
2016-04-13 20:00:24,414 c4f972ec MainThread coremark(1/1) INFO
prepare Coremark on 23.251.148.129
2016-04-13 20:00:24,415 c4f972ec MainThread coremark(1/1) INFO
Running: ssh -A -p 22 perfkit@23.251.148.129 -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/fg/
r7tm6d814zb g hgm0rndsz40000gn/T/perfkitbenchmarker/run c4f972ec/
perfkitbenchmarker keyfile sudo apt-get update
2016-04-13 20:00:31,828 c4f972ec MainThread coremark(1/1) INFO
Running: ssh -A -p 22 perfkit@23.251.148.129 -2 -o
UserKnownHostsFile=/dev/null -o StrictHostKeyChecking=no -o
IdentitiesOnlv=ves -o PreferredAuthentications=publickev -o
PasswordAuthentication=no -o ConnectTimeout=5 -o
GSSAPIAuthentication=no -o ServerAliveInterval=30 -o
ServerAliveCountMax=10 -i /var/folders/fg/
r7tm6d814zb g hgm0rndsz40000gn/T/perfkitbenchmarker/run c4f972ec/
perfkitbenchmarker_keyfile sudo DEBIAN_FRONTEND='noninteractive' /usr/
bin/apt-get -y install build-essential git libtool autoconf automake
2016-04-13 20:00:46,308 c4f972ec MainThread coremark(1/1) INFO
Running: scp -P 22 -pr -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/fg/
r7tm6d814zb g hgm0rndsz40000gn/T/perfkitbenchmarker/run c4f972ec/
perfkitbenchmarker_keyfile /Users/lichaozhang/Desktop/
PerfKitBenchmarker/perfkitbenchmarker/data/coremark_v1.0.tgz
perfkit@23.251.148.129:
2016-04-13 20:00:47,623 c4f972ec MainThread coremark(1/1) INFO
Running: ssh -A -p 22 perfkit@23.251.148.129 -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/fg/
r7tm6d814zb g hgm0rndsz40000gn/T/perfkitbenchmarker/run c4f972ec/
perfkitbenchmarker keyfile tar xvfz coremark v1.0.tgz
2016-04-13 20:00:48,342 c4f972ec MainThread coremark(1/1) INFO
Running: ssh -A -p 22 perfkit@23.251.148.129 -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/fg/
r7tm6d814zb g hgm0rndsz40000gn/T/perfkitbenchmarker/run c4f972ec/
perfkitbenchmarker keyfile sed -i -e "s/LFLAGS END += -lrt/LFLAGS END
+= -lrt -lpthread/g" coremark_v1.0/linux64/core_portme.mak
2016-04-13 20:00:49,004 c4f972ec MainThread coremark(1/1) INFO
Running benchmark coremark
2016-04-13 20:00:49,005 c4f972ec MainThread coremark(1/1) INFO
Coremark running on 23.251.148.129
```

```
2016-04-13 20:00:49,006 c4f972ec MainThread coremark(1/1) INFO
Running: ssh -A -p 22 perfkit@23.251.148.129 -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/fg/
r7tm6d814zb g hgm0rndsz40000gn/T/perfkitbenchmarker/run c4f972ec/
perfkitbenchmarker_keyfile cat /proc/cpuinfo | grep processor | wc -l
2016-04-13 20:00:49,666 c4f972ec MainThread coremark(1/1) INFO
Running: ssh -A -p 22 perfkit@23.251.148.129 -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/fg/
r7tm6d814zb g hgm0rndsz40000gn/T/perfkitbenchmarker/run c4f972ec/
perfkitbenchmarker keyfile cd coremark v1.0; make PORT DIR=linux64
ITERATIONS=200000 XCFLAGS="-g -02 -DMULTITHREAD=4 -DUSE_PTHREAD -
DPERFORMANCE RUN=1"
2016-04-13 20:01:26,611 c4f972ec MainThread coremark(1/1) INFO
Coremark Results:
2016-04-13 20:01:26,611 c4f972ec MainThread coremark(1/1) INFO
Running: ssh -A -p 22 perfkit@23.251.148.129 -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/fq/
r7tm6d814zb g hgm0rndsz40000gn/T/perfkitbenchmarker/run c4f972ec/
perfkitbenchmarker keyfile cat coremark v1.0/run1.log
2016-04-13 20:01:27,266 c4f972ec MainThread coremark(1/1) INFO
                                                                   Ran
ssh -A -p 22 perfkit@23.251.148.129 -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/fg/
r7tm6d814zb g hgm0rndsz40000gn/T/perfkitbenchmarker/run c4f972ec/
perfkitbenchmarker keyfile cat coremark v1.0/run1.log. Got return code
(0)
STDOUT: 2K performance run parameters for coremark.
CoreMark Size
                 : 666
Total ticks
                 : 17627
Total time (secs): 17.627000
Iterations/Sec
                : 45384.920860
Iterations
                 : 800000
Compiler version : GCC4.8.4
Compiler flags : -02 -g -02 -DMULTITHREAD=4 -DUSE_PTHREAD -
DPERFORMANCE RUN=1 -DPERFORMANCE RUN=1 -lrt -lpthread
Parallel PThreads: 4
```

```
Memory location : Please put data memory location here
                        (e.g. code in flash, data on heap etc)
                 : 0xe9f5
seedoro
[0]crclist
                 : 0xe714
[1]crclist
                : 0xe714
                : 0xe714
[2]crclist
[3]crclist
                : 0xe714
[0]crcmatrix
               : 0x1fd7
[1]crcmatrix
                : 0x1fd7
[2]crcmatrix
               : 0x1fd7
[3]crcmatrix
               : 0x1fd7
               : 0x8e3a
[0]crcstate
[1]crcstate
                : 0x8e3a
[2]crcstate
               : 0x8e3a
[3]crcstate
               : 0x8e3a
[0]crcfinal
                : 0x4983
[1]crcfinal
                : 0x4983
[2]crcfinal
                : 0x4983
[3]crcfinal
                 : 0x4983
Correct operation validated. See readme.txt for run and reporting
CoreMark 1.0: 45384.920860 / GCC4.8.4 -02 -q -02 -DMULTITHREAD=4 -
DUSE_PTHREAD -DPERFORMANCE_RUN=1 -DPERFORMANCE_RUN=1 -lrt -lpthread /
Heap / 4:PThreads
STDERR: Warning: Permanently added '23.251.148.129' (ECDSA) to the
list of known hosts.
2016-04-13 20:01:27,267 c4f972ec MainThread coremark(1/1) INFO
Cleaning up benchmark coremark
2016-04-13 20:01:27,267 c4f972ec MainThread coremark(1/1) INFO
Tearing down resources for benchmark coremark
2016-04-13 20:01:27,268 c4f972ec Thread-32 coremark(1/1) INFO
Running: gcloud compute instances delete pkb-c4f972ec-0 --format json
--quiet --project practical-bot-127123 --zone us-central1-a
2016-04-13 20:02:01,068 c4f972ec Thread-32 coremark(1/1) INFO
Running: gcloud compute instances describe pkb-c4f972ec-0 --format
json --quiet --project practical-bot-127123 --zone us-central1-a
2016-04-13 20:02:02,754 c4f972ec MainThread coremark(1/1) INFO
Running: gcloud compute firewall-rules delete perfkit-firewall-
c4f972ec-22 --format json --quiet --project practical-bot-127123
2016-04-13 20:02:26,164 c4f972ec MainThread coremark(1/1) INFO
Running: gcloud compute firewall-rules describe perfkit-firewall-
c4f972ec-22 --format json --quiet --project practical-bot-127123
2016-04-13 20:02:27,511 c4f972ec MainThread coremark(1/1) INFO
Running: gcloud compute firewall-rules delete default-internal-
c4f972ec --format json --quiet --project practical-bot-127123
2016-04-13 20:02:45,252 c4f972ec MainThread coremark(1/1) INFO
Running: gcloud compute firewall-rules describe default-internal-
c4f972ec --format json --quiet --project practical-bot-127123
```

```
2016-04-13 20:02:46,979 c4f972ec MainThread coremark(1/1) INFO
Running: gcloud compute networks delete pkb-network-c4f972ec --format
json --quiet --project practical-bot-127123
2016-04-13 20:03:15,045 c4f972ec MainThread coremark(1/1) INFO
Running: gcloud compute networks describe pkb-network-c4f972ec --
format json --quiet --project practical-bot-127123
2016-04-13 20:03:16,440 c4f972ec MainThread INFO
  -----PerfKitBenchmarker Complete
Results----
{'metadata': {'cloud': 'GCP',
              'image': 'ubuntu-14-04',
             'machine_type': 'n1-standard-4',
             'num_cpus': 4,
             'perfkitbenchmarker_version': 'unknown',
              'preemptible': False,
             'vm_count': 1,
             'zone': 'us-central1-a'},
 'metric': 'Coremark Score',
 'official': False,
 'owner': 'lichaozhang',
 'product name': 'PerfKitBenchmarker',
 'run uri': '02081cb2-bc48-4c31-a82c-0ebd89037581',
 'sample_uri': '80fa913c-fdfd-41b2-ad3a-b233085c0daa',
 'test': 'coremark',
 'timestamp': 1460592087.267085,
 'unit': '',
 'value': 45384.92086}
'machine type': 'n1-standard-4',
             'perfkitbenchmarker_version': 'unknown',
             'preemptible': False,
              'vm_count': 1,
             'zone': 'us-central1-a'},
 'metric': 'End to End Runtime',
 'official': False,
 'owner': 'lichaozhang',
 'product_name': 'PerfKitBenchmarker',
 'run uri': '02081cb2-bc48-4c31-a82c-0ebd89037581',
 'sample_uri': '04ba4c90-2b7c-474f-bf17-f8e830fa6594'.
 'test': 'coremark',
 'timestamp': 1460592196.43671,
 'unit': 'seconds',
 'value': 306.8553249835968}
         -----PerfKitBenchmarker Results
Summary-----
COREMARK:
  num cpus="4"
```

Coremark Score
End to End Runtime

## 45384.920860 306.855325 seconds

-----

For all tests: cloud="GCP" image="ubuntu-14-04" machine\_type="n1-standard-4" perfkitbenchmarker\_version="unknown" preemptible="False" vm\_count="1" zone="us-central1-a" 2016-04-13 20:03:16,440 c4f972ec MainThread INFO Publishing 2 samples to /var/folders/fq/r7tm6d814zb\_g\_hgm0rndsz40000gn/T/perfkitbenchmarker/run\_c4f972ec/perfkitbenchmarker\_results.json 2016-04-13 20:03:16,441 c4f972ec MainThread INFO Benchmark run statuses:

-----

Name UID Status
coremark coremark0 SUCCEEDED

Success rate: 100.00% (1/1)

2016-04-13 20:03:16,441 c4f972ec MainThread INFO Complete logs can

be found at: /var/folders/fg/r7tm6d814zb\_g\_hgm0rndsz40000gn/T/

perfkitbenchmarker/run\_c4f972ec/pkb.log

1x-nat-vl932-172-30-211-109:PerfKitBenchmarker lichaozhang\$