```
Last login: Wed Apr 13 20:20:14 on ttys000
1x-nat-vl932-172-30-211-109:~ lichaozhang$ cd Desktop/
PerfKitBenchmarker
1x-nat-vl932-172-30-211-109:PerfKitBenchmarker lichaozhang$ cd
Desktop/PerfKitBenchmarker
-bash: cd: Desktop/PerfKitBenchmarker: No such file or directory
1x-nat-vl932-172-30-211-109:PerfKitBenchmarker lichaozhang$ cd
Desktop/PerfKitBenchmarker
-bash: cd: Desktop/PerfKitBenchmarker: No such file or directory
1x-nat-vl932-172-30-211-109:PerfKitBenchmarker lichaozhang$ ./pkb.py
--project=practical-bot-127123 --benchmarks=coremark --
machine_type=n1-standard-8
2016-04-13 20:27:05,269 79fe785a MainThread INFO
                                                     Verbose logging
to: /var/folders/fg/r7tm6d814zb_g_hgm0rndsz40000gn/T/
perfkitbenchmarker/run 79fe785a/pkb.log
2016-04-13 20:27:05,269 79fe785a MainThread INFO
PerfKitBenchmarker version: unknown
2016-04-13 20:27:05,375 79fe785a MainThread INFO
                                                     Flag values:
--machine_type=n1-standard-8
--project=practical-bot-127123
--benchmarks=coremark
2016-04-13 20:27:05,407 79fe785a MainThread coremark(1/1) INFO
Provisioning resources for benchmark coremark
2016-04-13 20:27:05,408 79fe785a Thread-1 coremark(1/1) INFO
Running: gcloud compute networks create pkb-network-79fe785a --format
json --quiet --project practical-bot-127123 --range 10.0.0.0/16
2016-04-13 20:27:45,154 79fe785a Thread-1 coremark(1/1) INFO
Running: gcloud compute networks describe pkb-network-79fe785a --
format json --quiet --project practical-bot-127123
2016-04-13 20:27:47,124 79fe785a Thread-1 coremark(1/1) INFO
Running: gcloud compute firewall-rules create default-
internal-79fe785a --format json --quiet --project practical-bot-127123
--allow tcp:1-65535,udp:1-65535,icmp --network pkb-network-79fe785a --
source-ranges 10.0.0.0/16
2016-04-13 20:28:05,880 79fe785a Thread-1 coremark(1/1) INFO
Running: gcloud compute firewall-rules describe default-
internal-79fe785a --format json --quiet --project practical-bot-127123
2016-04-13 20:28:08,134 79fe785a Thread-6 coremark(1/1) INFO
Running: gcloud compute firewall-rules create perfkit-
firewall-79fe785a-22 --format json --quiet --project practical-
bot-127123 --allow tcp:22,udp:22 --network pkb-network-79fe785a
2016-04-13 20:28:31,949 79fe785a Thread-6 coremark(1/1) INFO
Running: gcloud compute firewall-rules describe perfkit-
firewall-79fe785a-22 --format json --quiet --project practical-
bot-127123
2016-04-13 20:28:33,899 79fe785a Thread-6 coremark(1/1) INFO
Running: gcloud compute instances create pkb-79fe785a-0 --format json
--quiet --project practical-bot-127123 --zone us-central1-a --network
pkb-network-79fe785a --image ubuntu-14-04 --boot-disk-auto-delete --
boot-disk-size 10 --boot-disk-type pd-standard --machine-type n1-
```

```
standard-8 --tags perfkitbenchmarker --no-restart-on-failure --
metadata-from-file sshKeys=/var/folders/fg/
r7tm6d814zb_g_hgm0rndsz40000gn/T/perfkitbenchmarker/run_79fe785a/key-
metadatawiQLZn --metadata owner=lichaozhang --maintenance-policy
TERMINATE
2016-04-13 20:29:09,340 79fe785a Thread-6 coremark(1/1) INFO
Running: gcloud compute instances describe pkb-79fe785a-0 --format
json --quiet --project practical-bot-127123 --zone us-central1-a
Running: gcloud compute instances describe pkb-79fe785a-0 --format
json --quiet --project practical-bot-127123 --zone us-central1-a
2016-04-13 20:29:13,531 79fe785a Thread-6 coremark(1/1) INFO
                                                                VM:
104.197.112.3
2016-04-13 20:29:13,532 79fe785a Thread-6 coremark(1/1) INFO
Waiting for boot completion.
2016-04-13 20:29:13,532 79fe785a Thread-6 coremark(1/1) INFO
Running: ssh -A -p 22 perfkit@104.197.112.3 -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_79fe785a/
perfkitbenchmarker keyfile hostname
2016-04-13 20:29:14,294 79fe785a Thread-6 coremark(1/1) INFO
Running: ssh -A -p 22 perfkit@104.197.112.3 -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 79fe785a/
perfkitbenchmarker keyfile hostname
2016-04-13 20:29:15,223 79fe785a Thread-6 coremark(1/1) INFO
Running: ssh -A -p 22 perfkit@104.197.112.3 -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 79fe785a/
perfkitbenchmarker keyfile hostname
2016-04-13 20:29:18,657 79fe785a Thread-6 coremark(1/1) INFO
Running: qcloud compute instances add-metadata pkb-79fe785a-0 --format
json --quiet --project practical-bot-127123 --zone us-central1-a --
metadata
benchmark uid=coremark0,benchmark=coremark,perfkit uuid=1c0671a7-
dc8c-4e2f-9977-c20c5644d249
2016-04-13 20:29:32,469 79fe785a Thread-6 coremark(1/1) INFO
Running: ssh -A -p 22 perfkit@104.197.112.3 -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 79fe785a/
perfkitbenchmarker_keyfile mkdir -p /tmp/pkb
2016-04-13 20:29:33,183 79fe785a 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 79fe785a/ssh config <vm name>
  ssh -F /var/folders/fg/r7tm6d814zb g hgm0rndsz40000gn/T/
perfkitbenchmarker/run_79fe785a/ssh_config vm<index>
  ssh -F /var/folders/fg/r7tm6d814zb g hgm0rndsz40000gn/T/
perfkitbenchmarker/run_79fe785a/ssh_config <group_name>-<index>
2016-04-13 20:29:33,185 79fe785a MainThread coremark(1/1) INFO
Preparing benchmark coremark
2016-04-13 20:29:33,186 79fe785a MainThread coremark(1/1) INFO
prepare Coremark on 104.197.112.3
2016-04-13 20:29:33,186 79fe785a MainThread coremark(1/1) INFO
Running: ssh -A -p 22 perfkit@104.197.112.3 -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 79fe785a/
perfkitbenchmarker keyfile sudo apt-get update
2016-04-13 20:29:39,096 79fe785a MainThread coremark(1/1) INFO
Running: ssh -A -p 22 perfkit@104.197.112.3 -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 79fe785a/
perfkitbenchmarker_keyfile sudo DEBIAN_FRONTEND='noninteractive' /usr/
bin/apt-get -y install build-essential git libtool autoconf automake
2016-04-13 20:29:52,979 79fe785a 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 79fe785a/
perfkitbenchmarker keyfile /Users/lichaozhang/Desktop/
PerfKitBenchmarker/perfkitbenchmarker/data/coremark_v1.0.tgz
perfkit@104.197.112.3:
2016-04-13 20:29:54,279 79fe785a MainThread coremark(1/1) INFO
Running: ssh -A -p 22 perfkit@104.197.112.3 -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 79fe785a/
perfkitbenchmarker_keyfile tar xvfz coremark_v1.0.tgz
```

```
2016-04-13 20:29:54,990 79fe785a MainThread coremark(1/1) INFO
Running: ssh -A -p 22 perfkit@104.197.112.3 -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 79fe785a/
perfkitbenchmarker keyfile sed -i -e "s/LFLAGS END += -lrt/LFLAGS END
+= -lrt -lpthread/g" coremark_v1.0/linux64/core_portme.mak
2016-04-13 20:29:55,663 79fe785a MainThread coremark(1/1) INFO
Running benchmark coremark
2016-04-13 20:29:55,664 79fe785a MainThread coremark(1/1) INFO
Coremark running on 104.197.112.3
2016-04-13 20:29:55,664 79fe785a MainThread coremark(1/1) INFO
Running: ssh -A -p 22 perfkit@104.197.112.3 -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 79fe785a/
perfkitbenchmarker_keyfile cat /proc/cpuinfo | grep processor | wc -l
2016-04-13 20:29:56,333 79fe785a MainThread coremark(1/1) INFO
Running: ssh -A -p 22 perfkit@104.197.112.3 -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 79fe785a/
perfkitbenchmarker_keyfile cd coremark_v1.0;make PORT_DIR=linux64
ITERATIONS=200000 XCFLAGS="-q -02 -DMULTITHREAD=8 -DUSE PTHREAD -
DPERFORMANCE RUN=1"
2016-04-13 20:30:34,347 79fe785a MainThread coremark(1/1) INFO
Coremark Results:
2016-04-13 20:30:34,347 79fe785a MainThread coremark(1/1) INFO
Running: ssh -A -p 22 perfkit@104.197.112.3 -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 79fe785a/
perfkitbenchmarker keyfile cat coremark v1.0/run1.log
2016-04-13 20:30:35,034 79fe785a MainThread coremark(1/1) INFO
                                                                   Ran
ssh -A -p 22 perfkit@104.197.112.3 -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_79fe785a/
perfkitbenchmarker keyfile cat coremark v1.0/run1.log. Got return code
(0).
```

```
STDOUT: 2K performance run parameters for coremark.
CoreMark Size
                   : 666
Total ticks
                   : 18065
Total time (secs): 18.065000
Iterations/Sec : 88569.056186
                   : 1600000
Iterations
Compiler version: GCC4.8.4
Compiler flags : -02 -g -02 -DMULTITHREAD=8 -DUSE PTHREAD -
DPERFORMANCE_RUN=1 -DPERFORMANCE_RUN=1 -lrt -lpthread
Parallel PThreads: 8
Memory location : Please put data memory location here
                           (e.g. code in flash, data on heap etc)
seedcrc
                   : 0xe9f5
[0]crclist
                   : 0xe714
[1]crclist
                   : 0xe714
[2]crclist
                  : 0xe714
[3]crclist
                 : 0xe714
[4]crclist
                 : 0xe714
[5]crclist
                 : 0xe714
[6]crclist
                 : 0xe714
                 : 0xe714
[7]crclist
[0]crcmatrix
                 : 0x1fd7
                 : 0x1fd7
[1]crcmatrix
                 : 0x1fd7
[2]crcmatrix
[3]crcmatrix : 0x1fd7
[4]crcmatrix : 0x1fd7
[5]crcmatrix
                 : 0x1fd7
[6]crcmatrix : 0x1fd7
[7]crcmatrix : 0x1fd7
[0]crcstate : 0x8e3a
[1]crcstate : 0x8e3a
[2]crcstate
                 : 0x8e3a
[3] crcstate : 0x8e3a
[4] crcstate : 0x8e3a
[5] crcstate : 0x8e3a
[6] crcstate : 0x8e3a
[7]crcstate
                 : 0x8e3a
[0]crcfinal : 0x4983
[1]crcfinal : 0x4983
[2]crcfinal
                 : 0x4983
[3]crcfinal
                 : 0x4983
[4]crcfinal
                 : 0x4983
[5]crcfinal
                  : 0x4983
[6]crcfinal
                  : 0x4983
[7]crcfinal
                   : 0x4983
Correct operation validated. See readme.txt for run and reporting
CoreMark 1.0: 88569.056186 / GCC4.8.4 -02 -g -02 -DMULTITHREAD=8 -
DUSE PTHREAD -DPERFORMANCE RUN=1 -DPERFORMANCE RUN=1 -lrt -lpthread /
Heap / 8:PThreads
```

```
of known hosts.
2016-04-13 20:30:35,036 79fe785a MainThread coremark(1/1) INFO
Cleaning up benchmark coremark
2016-04-13 20:30:35,037 79fe785a MainThread coremark(1/1) INFO
Tearing down resources for benchmark coremark
2016-04-13 20:30:35,037 79fe785a Thread-28 coremark(1/1) INFO
Running: gcloud compute instances delete pkb-79fe785a-0 --format json
--quiet --project practical-bot-127123 --zone us-central1-a
2016-04-13 20:31:10,359 79fe785a Thread-28 coremark(1/1) INFO
Running: gcloud compute instances describe pkb-79fe785a-0 --format
json --quiet --project practical-bot-127123 --zone us-central1-a
2016-04-13 20:31:12,357 79fe785a MainThread coremark(1/1) INFO
Running: gcloud compute firewall-rules delete perfkit-
firewall-79fe785a-22 --format ison --quiet --project practical-
bot-127123
2016-04-13 20:31:25,923 79fe785a MainThread coremark(1/1) INFO
Running: gcloud compute firewall-rules describe perfkit-
firewall-79fe785a-22 --format json --quiet --project practical-
bot-127123
2016-04-13 20:31:27,972 79fe785a MainThread coremark(1/1) INFO
Running: gcloud compute firewall-rules delete default-
internal-79fe785a --format json --quiet --project practical-bot-127123
2016-04-13 20:31:52,485 79fe785a MainThread coremark(1/1) INFO
Running: gcloud compute firewall-rules describe default-
internal-79fe785a --format json --quiet --project practical-bot-127123
2016-04-13 20:31:54,799 79fe785a MainThread coremark(1/1) INFO
Running: gcloud compute networks delete pkb-network-79fe785a --format
json --quiet --project practical-bot-127123
2016-04-13 20:32:33,690 79fe785a MainThread coremark(1/1) INFO
Running: acloud compute networks describe pkb-network-79fe785a --
format json --quiet --project practical-bot-127123
2016-04-13 20:32:35,421 79fe785a MainThread INFO
           -----PerfKitBenchmarker Complete
{'metadata': {'cloud': 'GCP',
              'image': 'ubuntu-14-04',
              'machine type': 'n1-standard-8',
              'num cpus': 8,
              'perfkitbenchmarker version': 'unknown',
              'preemptible': False,
              'vm_count': 1,
              'zone': 'us-central1-a'},
 'metric': 'Coremark Score',
 'official': False,
 'owner': 'lichaozhang',
 'product name': 'PerfKitBenchmarker',
 'run uri': '1c0671a7-dc8c-4e2f-9977-c20c5644d249',
```

STDERR: Warning: Permanently added '104.197.112.3' (ECDSA) to the list

```
'sample uri': '56d25573-6b33-434d-997c-8c69f9f97e97',
 'test': 'coremark',
 'timestamp': 1460593835.035881,
 'unit': '',
 'value': 88569.056186}
{'metadata': {'cloud': 'GCP',
              'image': 'ubuntu-14-04',
              'machine type': 'n1-standard-8',
              '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': '1c0671a7-dc8c-4e2f-9977-c20c5644d249',
 'sample uri': 'db67e0c1-3115-4530-bc7d-d55a899e19f6',
 'test': 'coremark',
 'timestamp': 1460593955.418816,
 'unit': 'seconds',
 'value': 330.0117287635803}
          -----PerfKitBenchmarker Results
Summary----
COREMARK:
  num cpus="8"
  Coremark Score
                                   88569.056186
  End to End Runtime
                                     330.011729 seconds
For all tests: cloud="GCP" image="ubuntu-14-04" machine_type="n1-
standard-8" perfkitbenchmarker version="unknown" preemptible="False"
vm_count="1" zone="us-central1-a"
2016-04-13 20:32:35,422 79fe785a MainThread INFO
                                                    Publishing 2
samples to /var/folders/fg/r7tm6d814zb g hgm0rndsz40000gn/T/
perfkitbenchmarker/run_79fe785a/perfkitbenchmarker_results.json
2016-04-13 20:32:35,423 79fe785a MainThread INFO Benchmark run
statuses:
Name UID Status
coremark coremark0 SUCCEEDED
Success rate: 100.00% (1/1)
2016-04-13 20:32:35,424 79fe785a MainThread INFO Complete logs can
be found at: /var/folders/fg/r7tm6d814zb_g_hgm0rndsz40000gn/T/
perfkitbenchmarker/run 79fe785a/pkb.log
1x-nat-vl932-172-30-211-109:PerfKitBenchmarker lichaozhang$
```