

```
Last login: Wed Apr 13 21:13:09 on ttys000
1x-nat-vl932-172-30-211-109:~ lichaozhang$ cd Desktop/
PerfKitBenchmark
1x-nat-vl932-172-30-211-109:PerfKitBenchmark lichaozhang$ ./pkb.py
--project=practical-bot-127123 --benchmarks=coremark --
machine_type=n1-highcpu-4
2016-04-13 21:21:17,860 53e7a169 MainThread INFO      Verbose logging
to: /var/folders/fq/r7tm6d814zb_g_hgm0rndsz40000gn/T/
perfkitbenchmark/run_53e7a169/pkb.log
2016-04-13 21:21:17,861 53e7a169 MainThread INFO
PerfKitBenchmark version: unknown
2016-04-13 21:21:17,988 53e7a169 MainThread INFO      Flag values:
--machine_type=n1-highcpu-4
--project=practical-bot-127123
--benchmarks=coremark
2016-04-13 21:21:18,018 53e7a169 MainThread coremark(1/1) INFO
Provisioning resources for benchmark coremark
2016-04-13 21:21:18,021 53e7a169 Thread-1 coremark(1/1) INFO
Running: gcloud compute networks create pkb-network-53e7a169 --format
json --quiet --project practical-bot-127123 --range 10.0.0.0/16
2016-04-13 21:21:51,932 53e7a169 Thread-1 coremark(1/1) INFO
Running: gcloud compute networks describe pkb-network-53e7a169 --
format json --quiet --project practical-bot-127123
2016-04-13 21:21:53,338 53e7a169 Thread-1 coremark(1/1) INFO
Running: gcloud compute firewall-rules create default-
internal-53e7a169 --format json --quiet --project practical-bot-127123
--allow tcp:1-65535,udp:1-65535,icmp --network pkb-network-53e7a169 --
source-ranges 10.0.0.0/16
2016-04-13 21:22:11,367 53e7a169 Thread-1 coremark(1/1) INFO
Running: gcloud compute firewall-rules describe default-
internal-53e7a169 --format json --quiet --project practical-bot-127123
2016-04-13 21:22:13,283 53e7a169 Thread-6 coremark(1/1) INFO
Running: gcloud compute firewall-rules create perfkit-
firewall-53e7a169-22 --format json --quiet --project practical-
bot-127123 --allow tcp:22,udp:22 --network pkb-network-53e7a169
2016-04-13 21:22:36,366 53e7a169 Thread-6 coremark(1/1) INFO
Running: gcloud compute firewall-rules describe perfkit-
firewall-53e7a169-22 --format json --quiet --project practical-
bot-127123
2016-04-13 21:22:37,676 53e7a169 Thread-6 coremark(1/1) INFO
Running: gcloud compute instances create pkb-53e7a169-0 --format json
--quiet --project practical-bot-127123 --zone us-central1-a --network
pkb-network-53e7a169 --image ubuntu-14-04 --boot-disk-auto-delete --
boot-disk-size 10 --boot-disk-type pd-standard --machine-type n1-
highcpu-4 --tags perfkitbenchmark --no-restart-on-failure --
metadata-from-file sshKeys=/var/folders/fq/
r7tm6d814zb_g_hgm0rndsz40000gn/T/perfkitbenchmark/run_53e7a169/key-
metadatab0g8zM --metadata owner=lichaozhang --maintenance-policy
TERMINATE
2016-04-13 21:23:02,332 53e7a169 Thread-6 coremark(1/1) INFO
```

```
Running: gcloud compute instances describe pkb-53e7a169-0 --format
json --quiet --project practical-bot-127123 --zone us-central1-a
2016-04-13 21:23:03,658 53e7a169 Thread-6 coremark(1/1) INFO
Running: gcloud compute instances describe pkb-53e7a169-0 --format
json --quiet --project practical-bot-127123 --zone us-central1-a
2016-04-13 21:23:05,358 53e7a169 Thread-6 coremark(1/1) INFO      VM:
104.197.112.3
2016-04-13 21:23:05,358 53e7a169 Thread-6 coremark(1/1) INFO
Waiting for boot completion.
2016-04-13 21:23:05,359 53e7a169 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/perfkitbenchmark/run_53e7a169/
perfkitbenchmark_keyfile hostname
2016-04-13 21:23:08,134 53e7a169 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/perfkitbenchmark/run_53e7a169/
perfkitbenchmark_keyfile hostname
2016-04-13 21:23:08,804 53e7a169 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/perfkitbenchmark/run_53e7a169/
perfkitbenchmark_keyfile hostname
2016-04-13 21:23:11,409 53e7a169 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/perfkitbenchmark/run_53e7a169/
perfkitbenchmark_keyfile hostname
2016-04-13 21:23:12,327 53e7a169 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/perfkitbenchmark/run_53e7a169/
perfkitbenchmark_keyfile hostname
2016-04-13 21:23:18,080 53e7a169 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/perfkitbenchmark/run_53e7a169/
perfkitbenchmark_keyfile hostname
2016-04-13 21:23:21,109 53e7a169 Thread-6 coremark(1/1) INFO
Running: gcloud compute instances add-metadata pkb-53e7a169-0 --format
json --quiet --project practical-bot-127123 --zone us-central1-a --
metadata
benchmark_uid=coremark0,benchmark=coremark,perfkit_uuid=29bdd7e2-6453-
4b85-9f76-32347201a33c
2016-04-13 21:23:39,342 53e7a169 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/perfkitbenchmark/run_53e7a169/
perfkitbenchmark_keyfile mkdir -p /tmp/pkb
2016-04-13 21:23:40,026 53e7a169 MainThread coremark(1/1) INFO      ssh
to VMs in this benchmark by name with:
    ssh -F /var/folders/fq/r7tm6d814zb_g_hgm0rndsz40000gn/T/
perfkitbenchmark/run_53e7a169/ssh_config <vm_name>
    ssh -F /var/folders/fq/r7tm6d814zb_g_hgm0rndsz40000gn/T/
perfkitbenchmark/run_53e7a169/ssh_config vm<index>
    ssh -F /var/folders/fq/r7tm6d814zb_g_hgm0rndsz40000gn/T/
perfkitbenchmark/run_53e7a169/ssh_config <group_name>-<index>
2016-04-13 21:23:40,028 53e7a169 MainThread coremark(1/1) INFO
Preparing benchmark coremark
2016-04-13 21:23:40,028 53e7a169 MainThread coremark(1/1) INFO
prepare Coremark on 104.197.112.3
2016-04-13 21:23:40,029 53e7a169 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/perfkitbenchmark/run_53e7a169/
perfkitbenchmark_keyfile sudo apt-get update
2016-04-13 21:23:45,678 53e7a169 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/perfkitbenchmark/run_53e7a169/
perfkitbenchmark_keyfile sudo DEBIAN_FRONTEND='noninteractive' /usr/
bin/apt-get -y install build-essential git libtool autoconf automake

```

```

2016-04-13 21:23:59,834 53e7a169 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/fq/
r7tm6d814zb_g_hgm0rndsz40000gn/T/perfkitbenchmark/run_53e7a169/
perfkitbenchmark_keyfile /Users/lichaozhang/Desktop/
PerfKitBenchmark/perfkitbenchmark/data/coremark_v1.0.tgz
perfkit@104.197.112.3:
2016-04-13 21:24:01,344 53e7a169 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/perfkitbenchmark/run_53e7a169/
perfkitbenchmark_keyfile tar xvfz coremark_v1.0.tgz
2016-04-13 21:24:02,119 53e7a169 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/perfkitbenchmark/run_53e7a169/
perfkitbenchmark_keyfile sed -i -e "s/LFLAGS_END += -lrt/LFLAGS_END
+= -lrt -lpthread/g" coremark_v1.0/linux64/core_portme.mak
2016-04-13 21:24:02,799 53e7a169 MainThread coremark(1/1) INFO
Running benchmark coremark
2016-04-13 21:24:02,799 53e7a169 MainThread coremark(1/1) INFO
Coremark running on 104.197.112.3
2016-04-13 21:24:02,800 53e7a169 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/perfkitbenchmark/run_53e7a169/
perfkitbenchmark_keyfile cat /proc/cpuinfo | grep processor | wc -l
2016-04-13 21:24:03,463 53e7a169 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/perfkitbenchmark/run_53e7a169/
perfkitbenchmark_keyfile cd coremark_v1.0;make PORT_DIR=linux64
ITERATIONS=200000 XCFLAGS="-g -O2 -DMULTITHREAD=4 -DUSE_PTHREAD -
DPERFORMANCE_RUN=1"
2016-04-13 21:24:40,417 53e7a169 MainThread coremark(1/1) INFO

```

Coremark Results:

```
2016-04-13 21:24:40,418 53e7a169 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_hgm0rnsz40000gn/T/perfkitbenchmark/run_53e7a169/
perfkitbenchmark_keyfile cat coremark_v1.0/run1.log
2016-04-13 21:24:41,080 53e7a169 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_hgm0rnsz40000gn/T/perfkitbenchmark/run_53e7a169/
perfkitbenchmark_keyfile cat coremark_v1.0/run1.log. Got return code
(0).
```

STDOUT: 2K performance run parameters for coremark.

```
CoreMark Size      : 666
Total ticks        : 17681
Total time (secs): 17.681000
Iterations/Sec     : 45246.309598
Iterations         : 800000
Compiler version   : GCC4.8.4
Compiler flags     : -O2 -g -O2 -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)
```

```
seedcrc           : 0xe9f5
[0]crclist        : 0xe714
[1]crclist        : 0xe714
[2]crclist        : 0xe714
[3]crclist        : 0xe714
[0]crcmatrix      : 0x1fd7
[1]crcmatrix      : 0x1fd7
[2]crcmatrix      : 0x1fd7
[3]crcmatrix      : 0x1fd7
[0]crcstate       : 0x8e3a
[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 rules.

CoreMark 1.0 : 45246.309598 / GCC4.8.4 -O2 -g -O2 -DMULTITHREAD=4 -

```
DUSE_PTHREAD -DPERFORMANCE_RUN=1 -DPERFORMANCE_RUN=1 -lrt -lpthread /
Heap / 4:PThreads
```

STDERR: Warning: Permanently added '104.197.112.3' (ECDSA) to the list of known hosts.

```
2016-04-13 21:24:41,083 53e7a169 MainThread coremark(1/1) INFO
Cleaning up benchmark coremark
2016-04-13 21:24:41,083 53e7a169 MainThread coremark(1/1) INFO
Tearing down resources for benchmark coremark
2016-04-13 21:24:41,084 53e7a169 Thread-31 coremark(1/1) INFO
Running: gcloud compute instances delete pkb-53e7a169-0 --format json
--quiet --project practical-bot-127123 --zone us-central1-a
2016-04-13 21:25:15,280 53e7a169 Thread-31 coremark(1/1) INFO
Running: gcloud compute instances describe pkb-53e7a169-0 --format
json --quiet --project practical-bot-127123 --zone us-central1-a
2016-04-13 21:25:16,648 53e7a169 MainThread coremark(1/1) INFO
Running: gcloud compute firewall-rules delete perfkit-
firewall-53e7a169-22 --format json --quiet --project practical-
bot-127123
2016-04-13 21:25:34,790 53e7a169 MainThread coremark(1/1) INFO
Running: gcloud compute firewall-rules describe perfkit-
firewall-53e7a169-22 --format json --quiet --project practical-
bot-127123
2016-04-13 21:25:36,094 53e7a169 MainThread coremark(1/1) INFO
Running: gcloud compute firewall-rules delete default-
internal-53e7a169 --format json --quiet --project practical-bot-127123
2016-04-13 21:25:48,546 53e7a169 MainThread coremark(1/1) INFO
Running: gcloud compute firewall-rules describe default-
internal-53e7a169 --format json --quiet --project practical-bot-127123
2016-04-13 21:25:49,961 53e7a169 MainThread coremark(1/1) INFO
Running: gcloud compute networks delete pkb-network-53e7a169 --format
json --quiet --project practical-bot-127123
2016-04-13 21:26:23,150 53e7a169 MainThread coremark(1/1) INFO
Running: gcloud compute networks describe pkb-network-53e7a169 --
format json --quiet --project practical-bot-127123
2016-04-13 21:26:24,509 53e7a169 MainThread INFO
```

-----PerfKitBenchmark Complete

Results-----

```
{'metadata': {'cloud': 'GCP',
               'image': 'ubuntu-14-04',
               'machine_type': 'n1-highcpu-4',
               'num_cpus': 4,
               'perfkitbenchmark_version': 'unknown',
               'preemptible': False,
               'vm_count': 1,
               'zone': 'us-central1-a'},
 'metric': 'Coremark Score',
 'official': False,
 'owner': 'lichaozhang',
```

```

'product_name': 'PerfKitBenchmarker',
'run_uri': '29bdd7e2-6453-4b85-9f76-32347201a33c',
'sample_uri': '9bdb197-f0d3-4f7e-94cd-221763212f36',
'test': 'coremark',
'timestamp': 1460597081.082447,
'unit': '',
'value': 45246.309598}
{'metadata': {'cloud': 'GCP',
              'image': 'ubuntu-14-04',
              'machine_type': 'n1-highcpu-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': '29bdd7e2-6453-4b85-9f76-32347201a33c',
'sample_uri': '6033ff81-2e53-44da-8e27-faaf7cbfe129',
'test': 'coremark',
'timestamp': 1460597184.50683,
'unit': 'seconds',
'value': 306.4881761074066}

```

#### -----PerfKitBenchmarker Results

Summary-----

COREMARK:

```

num_cpus="4"
Coremark Score          45246.309598
End to End Runtime      306.488176 seconds

```

-----  
For all tests: cloud="GCP" image="ubuntu-14-04" machine\_type="n1-highcpu-4" perfkitbenchmarker\_version="unknown" preemptible="False" vm\_count="1" zone="us-central1-a"

```

2016-04-13 21:26:24,510 53e7a169 MainThread INFO    Publishing 2
samples to /var/folders/fq/r7tm6d814zb_g_hgm0rndsz40000gn/T/
perfkitbenchmarker/run_53e7a169/perfkitbenchmarker_results.json
2016-04-13 21:26:24,510 53e7a169 MainThread INFO    Benchmark run
statuses:

```

```

-----
Name      UID      Status
-----
coremark  coremark0  SUCCEEDED
-----

```

Success rate: 100.00% (1/1)

```

2016-04-13 21:26:24,511 53e7a169 MainThread INFO    Complete logs can
be found at: /var/folders/fq/r7tm6d814zb_g_hgm0rndsz40000gn/T/

```

```
perfkitbenchmark/run_53e7a169/pkb.log  
1x-nat-vl932-172-30-211-109:PerfKitBenchmarker lichaozhang$
```