

```
Last login: Wed Apr 13 20:50:53 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-highmem-4
2016-04-13 21:00:48,918 62c3e479 MainThread INFO      Verbose logging
to: /var/folders/fq/r7tm6d814zb_g_hgm0rndsz40000gn/T/
perfkitbenchmark/run_62c3e479/pkb.log
2016-04-13 21:00:48,919 62c3e479 MainThread INFO
PerfKitBenchmark version: unknown
2016-04-13 21:00:49,009 62c3e479 MainThread INFO      Flag values:
--machine_type=n1-highmem-4
--project=practical-bot-127123
--benchmarks=coremark
2016-04-13 21:00:49,042 62c3e479 MainThread coremark(1/1) INFO
Provisioning resources for benchmark coremark
2016-04-13 21:00:49,044 62c3e479 Thread-1 coremark(1/1) INFO
Running: gcloud compute networks create pkb-network-62c3e479 --format
json --quiet --project practical-bot-127123 --range 10.0.0.0/16
2016-04-13 21:01:24,123 62c3e479 Thread-1 coremark(1/1) INFO
Running: gcloud compute networks describe pkb-network-62c3e479 --
format json --quiet --project practical-bot-127123
2016-04-13 21:01:25,378 62c3e479 Thread-1 coremark(1/1) INFO
Running: gcloud compute firewall-rules create default-
internal-62c3e479 --format json --quiet --project practical-bot-127123
--allow tcp:1-65535,udp:1-65535,icmp --network pkb-network-62c3e479 --
source-ranges 10.0.0.0/16
2016-04-13 21:01:49,193 62c3e479 Thread-1 coremark(1/1) INFO
Running: gcloud compute firewall-rules describe default-
internal-62c3e479 --format json --quiet --project practical-bot-127123
2016-04-13 21:01:50,369 62c3e479 Thread-6 coremark(1/1) INFO
Running: gcloud compute firewall-rules create perfkit-
firewall-62c3e479-22 --format json --quiet --project practical-
bot-127123 --allow tcp:22,udp:22 --network pkb-network-62c3e479
2016-04-13 21:02:08,392 62c3e479 Thread-6 coremark(1/1) INFO
Running: gcloud compute firewall-rules describe perfkit-
firewall-62c3e479-22 --format json --quiet --project practical-
bot-127123
2016-04-13 21:02:09,527 62c3e479 Thread-6 coremark(1/1) INFO
Running: gcloud compute instances create pkb-62c3e479-0 --format json
--quiet --project practical-bot-127123 --zone us-central1-a --network
pkb-network-62c3e479 --image ubuntu-14-04 --boot-disk-auto-delete --
boot-disk-size 10 --boot-disk-type pd-standard --machine-type n1-
highmem-4 --tags perfkitbenchmark --no-restart-on-failure --
metadata-from-file sshKeys=/var/folders/fq/
r7tm6d814zb_g_hgm0rndsz40000gn/T/perfkitbenchmark/run_62c3e479/key-
metadata/ --metadata owner=lichaozhang --maintenance-policy
TERMINATE
2016-04-13 21:02:33,352 62c3e479 Thread-6 coremark(1/1) INFO
```

```
Running: gcloud compute instances describe pkb-62c3e479-0 --format
json --quiet --project practical-bot-127123 --zone us-central1-a
2016-04-13 21:02:34,464 62c3e479 Thread-6 coremark(1/1) INFO
Running: gcloud compute instances describe pkb-62c3e479-0 --format
json --quiet --project practical-bot-127123 --zone us-central1-a
2016-04-13 21:02:35,975 62c3e479 Thread-6 coremark(1/1) INFO      VM:
104.197.112.3
2016-04-13 21:02:35,975 62c3e479 Thread-6 coremark(1/1) INFO
Waiting for boot completion.
2016-04-13 21:02:35,976 62c3e479 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_62c3e479/
perfkitbenchmark_keyfile hostname
2016-04-13 21:02:40,950 62c3e479 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_62c3e479/
perfkitbenchmark_keyfile hostname
2016-04-13 21:02:41,623 62c3e479 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_62c3e479/
perfkitbenchmark_keyfile hostname
2016-04-13 21:02:47,437 62c3e479 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_62c3e479/
perfkitbenchmark_keyfile hostname
2016-04-13 21:02:48,243 62c3e479 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_62c3e479/
perfkitbenchmark_keyfile hostname
2016-04-13 21:02:49,055 62c3e479 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_62c3e479/
perfkitbenchmark_keyfile hostname
2016-04-13 21:02:52,238 62c3e479 Thread-6 coremark(1/1) INFO
Running: gcloud compute instances add-metadata pkb-62c3e479-0 --format
json --quiet --project practical-bot-127123 --zone us-central1-a --
metadata
benchmark_uid=coremark0,benchmark=coremark,perfkit_uuid=93bc9331-
f0ad-4112-9092-7074988272b0
2016-04-13 21:03:05,113 62c3e479 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_62c3e479/
perfkitbenchmark_keyfile mkdir -p /tmp/pkb
2016-04-13 21:03:05,853 62c3e479 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_62c3e479/ssh_config <vm_name>
    ssh -F /var/folders/fq/r7tm6d814zb_g_hgm0rndsz40000gn/T/
perfkitbenchmark/run_62c3e479/ssh_config vm<index>
    ssh -F /var/folders/fq/r7tm6d814zb_g_hgm0rndsz40000gn/T/
perfkitbenchmark/run_62c3e479/ssh_config <group_name>-<index>
2016-04-13 21:03:05,855 62c3e479 MainThread coremark(1/1) INFO
Preparing benchmark coremark
2016-04-13 21:03:05,855 62c3e479 MainThread coremark(1/1) INFO
prepare Coremark on 104.197.112.3
2016-04-13 21:03:05,856 62c3e479 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_62c3e479/
perfkitbenchmark_keyfile sudo apt-get update
2016-04-13 21:03:11,998 62c3e479 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_62c3e479/
perfkitbenchmark_keyfile sudo DEBIAN_FRONTEND='noninteractive' /usr/
bin/apt-get -y install build-essential git libtool autoconf automake

```

```

2016-04-13 21:03:26,232 62c3e479 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_62c3e479/
perfkitbenchmark_keyfile /Users/lichaozhang/Desktop/
PerfKitBenchmark/perfkitbenchmark/data/coremark_v1.0.tgz
perfkit@104.197.112.3:
2016-04-13 21:03:27,539 62c3e479 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_62c3e479/
perfkitbenchmark_keyfile tar xvfz coremark_v1.0.tgz
2016-04-13 21:03:28,252 62c3e479 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_62c3e479/
perfkitbenchmark_keyfile sed -i -e "s/LFLAGS_END += -lrt/LFLAGS_END
+= -lrt -lpthread/g" coremark_v1.0/linux64/core_portme.mak
2016-04-13 21:03:28,915 62c3e479 MainThread coremark(1/1) INFO
Running benchmark coremark
2016-04-13 21:03:28,916 62c3e479 MainThread coremark(1/1) INFO
Coremark running on 104.197.112.3
2016-04-13 21:03:28,916 62c3e479 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_62c3e479/
perfkitbenchmark_keyfile cat /proc/cpuinfo | grep processor | wc -l
2016-04-13 21:03:29,581 62c3e479 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_62c3e479/
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 21:04:06,375 62c3e479 MainThread coremark(1/1) INFO

```

Coremark Results:

```
2016-04-13 21:04:06,376 62c3e479 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_62c3e479/
perfkitbenchmark_keyfile cat coremark_v1.0/run1.log
2016-04-13 21:04:07,020 62c3e479 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_62c3e479/
perfkitbenchmark_keyfile cat coremark_v1.0/run1.log. Got return code
(0).
```

STDOUT: 2K performance run parameters for coremark.

```
CoreMark Size      : 666
Total ticks        : 17631
Total time (secs): 17.631000
Iterations/Sec     : 45374.624241
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 : 45374.624241 / 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 21:04:07,025 62c3e479 MainThread coremark(1/1) INFO
Cleaning up benchmark coremark
2016-04-13 21:04:07,026 62c3e479 MainThread coremark(1/1) INFO
Tearing down resources for benchmark coremark
2016-04-13 21:04:07,027 62c3e479 Thread-31 coremark(1/1) INFO
Running: gcloud compute instances delete pkb-62c3e479-0 --format json
--quiet --project practical-bot-127123 --zone us-central1-a
2016-04-13 21:04:45,544 62c3e479 Thread-31 coremark(1/1) INFO
Running: gcloud compute instances describe pkb-62c3e479-0 --format
json --quiet --project practical-bot-127123 --zone us-central1-a
2016-04-13 21:04:46,879 62c3e479 MainThread coremark(1/1) INFO
Running: gcloud compute firewall-rules delete perfkit-
firewall-62c3e479-22 --format json --quiet --project practical-
bot-127123
2016-04-13 21:05:15,460 62c3e479 MainThread coremark(1/1) INFO
Running: gcloud compute firewall-rules describe perfkit-
firewall-62c3e479-22 --format json --quiet --project practical-
bot-127123
2016-04-13 21:05:16,908 62c3e479 MainThread coremark(1/1) INFO
Running: gcloud compute firewall-rules delete default-
internal-62c3e479 --format json --quiet --project practical-bot-127123
2016-04-13 21:05:34,319 62c3e479 MainThread coremark(1/1) INFO
Running: gcloud compute firewall-rules describe default-
internal-62c3e479 --format json --quiet --project practical-bot-127123
2016-04-13 21:05:35,491 62c3e479 MainThread coremark(1/1) INFO
Running: gcloud compute networks delete pkb-network-62c3e479 --format
json --quiet --project practical-bot-127123
2016-04-13 21:06:14,777 62c3e479 MainThread coremark(1/1) INFO
Running: gcloud compute networks describe pkb-network-62c3e479 --
format json --quiet --project practical-bot-127123
2016-04-13 21:06:15,965 62c3e479 MainThread INFO
-----PerfKitBenchmark Complete
```

Results-----

```
{'metadata': {'cloud': 'GCP',
               'image': 'ubuntu-14-04',
               'machine_type': 'n1-highmem-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': '93bc9331-f0ad-4112-9092-7074988272b0',
'sample_uri': 'd35b1912-d709-46ae-bbd7-a636a0e954c7',
'test': 'coremark',
'timestamp': 1460595847.022558,
'unit': '',
'value': 45374.624241}
{'metadata': {'cloud': 'GCP',
              'image': 'ubuntu-14-04',
              'machine_type': 'n1-highmem-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': '93bc9331-f0ad-4112-9092-7074988272b0',
'sample_uri': 'bff7aa9e-953f-45bc-9fd7-1f54db0c08ab',
'test': 'coremark',
'timestamp': 1460595975.962514,
'unit': 'seconds',
'value': 326.9198188781738}

```

#### -----PerfKitBenchmarker Results

Summary-----

##### COREMARK:

```

num_cpus="4"
Coremark Score          45374.624241
End to End Runtime      326.919819 seconds

```

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

2016-04-13 21:06:15,966 62c3e479 MainThread INFO Publishing 2 samples to /var/folders/fq/r7tm6d814zb\_g\_hgm0rndsz40000gn/T/perfkitbenchmarker/run\_62c3e479/perfkitbenchmarker\_results.json

2016-04-13 21:06:15,966 62c3e479 MainThread INFO Benchmark run statuses:

Name	UID	Status
coremark	coremark0	SUCCEEDED

Success rate: 100.00% (1/1)

2016-04-13 21:06:15,966 62c3e479 MainThread INFO Complete logs can be found at: /var/folders/fq/r7tm6d814zb\_g\_hgm0rndsz40000gn/T/

```
perfkitbenchmark/run_62c3e479/pkb.log  
1x-nat-vl932-172-30-211-109:PerfKitBenchmarker lichaozhang$
```