

1. Google Code Labs Cloud Dataproc

The screenshots show three consecutive steps in a Cloud Shell terminal:

- Step 1: Setting up the Cloud Shell environment.**

```
Welcome to Cloud Shell! Type "help" to get started.  
To set your Cloud Platform project in this session use "gcloud config set project [PROJECT_ID]"  
pi2018@cloudshell:~$ gcloud auth list  
Credentialed Accounts  
ACTIVE: *  
ACCOUNT: pi2018@nyu.edu  
To set the active account, run:  
  $ gcloud config set account 'ACCOUNT'  
pi2018@cloudshell:~$ gcloud config list project  
[core]  
project = (unset)  
Your active configuration is: [cloudshell-17414]  
pi2018@cloudshell:~$ gcloud config set project homework-5-12345  
Updated property [core/project].  
pi2018@cloudshell:~$ gcloud config list project  
[core]  
project = homework-5-12345  
Your active configuration is: [cloudshell-17414]  
pi2018@cloudshell:~$ echo $GOOGLE_CLOUD_PROJECT  
homework-5-12345  
pi2018@cloudshell:~$ gcloud config set compute/zone us-central1-f  
API [compute.googleapis.com] not enabled on project [homework-5-12345]. Would you like to enable and retry (this will take a few minutes)? (y/N)? Y  
Enabling service [compute.googleapis.com] on project [homework-5-12345]...  
Operation "operations/acf_p2-755035978333-74bel13a-23ad-4f50-82e7-50a782ad2cb6" finished successfully.  
Updated property [compute/zone].  
pi2018@cloudshell:~$ gcloud config set compute/zone us-central1-f  
Updated property [compute/zone].  
pi2018@cloudshell:~$ gcloud config set compute/zone us-central1-f
```
- Step 2: Creating the Dataproc cluster.**

```
[core]  
project = homework-5-12345  
Your active configuration is: [cloudshell-17414]  
pi2018@cloudshell:~$ echo $GOOGLE_CLOUD_PROJECT  
homework-5-12345  
pi2018@cloudshell:~$ gcloud config set compute/zone us-central1-f  
API [compute.googleapis.com] not enabled on project [homework-5-12345]. Would you like to enable and retry (this will take a few minutes)? (y/N)? Y  
Enabling service [compute.googleapis.com] on project [homework-5-12345]...  
Operation "operations/acf_p2-755035978333-74bel13a-23ad-4f50-82e7-50a782ad2cb6" finished successfully.  
Updated property [compute/zone].  
pi2018@cloudshell:~$ gcloud config set compute/zone us-central1-f  
Updated property [compute/zone].  
pi2018@cloudshell:~$ gcloud config set compute/zone us-central1-f  
pi2018@cloudshell:~$ gcloud dataproc clusters create $homework5  
--region=us-central1  
--scopes=cloud-platform  
--tags=codelab  
--zone=us-central1-c  
API [dataproc.googleapis.com] not enabled on project [homework-5-12345]. Would you like to enable and retry (this will take a few minutes)? (y/N)? Y  
Enabling service [dataproc.googleapis.com] on project [homework-5-12345]...  
Operation "operations/acf_p2-755035978333-f5d5b2a9-9e3b-4884-bf0f-cd7fcfb0d45" finished successfully.  
Waiting for cluster creation operation...  
Waiting for cluster creation operation...  
WARNING: No image specific. Using the default image version. It is recommended to select a specific image version in production, as the default image version may change at any time.  
WARNING: Consider using Auto Zone rather than selecting a zone manually. See https://cloud.google.com/dataproc/docs/concepts/configuring-clusters/auto-zone  
WARNING: It will be necessary to update permissions or firewall for defined service account: 755035978333-compute-developer@google-serviceaccount-1. Cluster creation could still fail if the required permission or firewall rule is not present in the cluster. This could be due to specifying a cross-project VM service account follow the instructions at https://cloud.google.com/iam/docs/impersonating-service-accounts#attaching-different-project as not configuring properly could result in cluster creation failures during later stages.  
WARNING: The firewall rules for specified network or subnet would allow ingress traffic from 0.0.0.0/0, which could be a security risk.  
Waiting for cluster creation operation...done.  
Created [https://dataproc.googleapis.com/v1/projects/homework-5-12345/regions/us-central1/clusters/pi2018-dplab] Cluster placed in zone [us-central1-c].
```
- Step 3: Monitoring the cluster's activity.**

```
or it can be set temporarily by the environment variable [CLOUDSDK_DATAPROC_REGION]  
pi2018@cloudshell:~$ gcloud config set dataproc/region us-central1  
Updated property [dataproc/region].  
pi2018@cloudshell:~$ gcloud dataproc jobs submit spark --cluster $homework5 --class org.apache.spark.examples.SparkPi --jars file:///usr/lib/spark/examples/jars/spark-examples.jar --properties spark.executor.instances=4,spark.executor.memory=4g -- 1000  
Job [ae363c5e1de54f1099f46fc151c8a] submitted.  
Waiting for job output...  
23/10/10 16:38:04 INFO org.apache.spark.SparkKrb5: Registering MapOutputTracker  
23/10/10 16:38:04 INFO org.apache.spark.SparkKrb5: Registering BlockManagerMaster  
23/10/10 16:38:05 INFO org.apache.spark.SparkKrb5: Registering BlockManagerMasterHeartbeat  
23/10/10 16:38:05 INFO org.apache.spark.SparkKrb5: Registering ApplicationMaster  
23/10/10 16:38:05 INFO org.sparkproject.jetty.util.log: Logging initialized @4293ms to org.sparkproject.jetty.util.log.Slf4jLog  
23/10/10 16:38:05 INFO org.sparkproject.jetty.server.Server: jetty-9.4.40.v20210413; built: 2021-04-13T20:42:66Z; git: b881a572662el943a14ae12e7e107989e21b747; jvm: 1.8.0_382-b0  
23/10/10 16:38:05 INFO org.apache.project.jetty.server.Server: Started @4445ms  
23/10/10 16:38:05 INFO org.sparkproject.jetty.server.AbstractConnector: Started ServerConnector@1549ba7{HTTP/1.1, (http/1.1)}{0.0.0.0:35893}  
23/10/10 16:38:06 INFO org.apache.hadoop.yarn.client.RMProxy: Connecting to ResourceManager at pi2018-dplab-m/10.128.0.3:8032  
23/10/10 16:38:06 INFO org.apache.hadoop.yarn.client.AMSProxy: Connecting to Application History server at pi2018-dplab-m/10.128.0.3:10200  
23/10/10 16:38:07 INFO org.apache.hadoop.conf.Configuration: Configuration resource-types.xml not found  
23/10/10 16:38:07 INFO org.apache.hadoop.yarn.util.resource.ResourceUtil: Unable to find 'resource-types.xml'  
23/10/10 16:38:07 INFO org.apache.hadoop.yarn.Client: YarnClient: Created application application_1696955961912_0001  
23/10/10 16:38:10 INFO org.apache.hadoop.yarn.client.RMProxy: Connecting to ResourceManager at pi2018-dplab-m/10.128.0.3:8030  
23/10/10 16:38:12 INFO com.google.cloud.hadoop.fs.gcs.GfsStorageStatistics: Detected potential high latency for operation op get_file.status. latencyMs=399; previousMaxLatencyMs=0; operationCount=1; context=gs://dataproc-temp-us-central1-755035978333-4hrmajc/b46b21d4-b19e-4c37-9a35-1dd4f7ead14e/spark-job-history  
23/10/10 16:38:12 INFO com.google.cloud.hadoop.fs.gcs.GfsStorageStatistics: Ignoring exception of type GoogleJsonResponseException: verified object already exists in desired state.  
23/10/10 16:38:12 INFO com.google.cloud.hadoop.fs.gcs.GfsStorageStatistics: Detected potential high latency for operation op mkdirs. latencyMs=326; previousMaxLatencyMs=0; operationCount=1; context=gs://dataproc-temp-us-central1-755035978333-4hrmajc/b46b21d4-b19e-4c37-9a35-1dd4f7ead14e/spark-job-history  
23/10/10 16:38:13 INFO com.google.cloud.hadoop.fs.gcs.GfsStorageStatistics: Detected potential high latency for operation op create. latencyMs=399; previousMaxLatencyMs=0; operationCount=1; context=gs://dataproc-temp-us-central1-755035978333-4hrmajc/b46b21d4-b19e-4c37-9a35-1dd4f7ead14e/spark-job-history/app  
23/10/10 16:38:13 INFO com.google.cloud.hadoop.fs.gcs.GfsStorageStatistics: Detected potential high latency for operation op rename. latencyMs=398; previousMaxLatencyMs=0; operationCount=1; context=gs://dataproc-temp-us-central1-755035978333-4hrmajc/b46b21d4-b19e-4c37-9a35-1dd4f7ead14e/spark-job-history  
23/10/10 16:38:28 INFO org.sparkproject.jetty.server.AbstractConnector: Stopped Spark@1549ba7{HTTP/1.1, (http/1.1)}{0.0.0.0:0}  
23/10/10 16:38:29 INFO com.google.cloud.hadoop.fs.gcs.GfsStorageStatistics: Detected potential high latency for operation stream.write.close operations. latencyMs=219; previousMaxLatencyMs=0; operationCount=1; context=gs://dataproc-temp-us-central1-755035978333-4hrmajc/b46b21d4-b19e-4c37-9a35-1dd4f7ead14e/spark-job-history/application_1696955961912_0001.inprogress  
23/10/10 16:38:30 INFO com.google.cloud.hadoop.fs.gcs.GfsStorageStatistics: Detected potential high latency for operation op_rename. latencyMs=398; previousMaxLatencyMs=0; operationCount=1; context=gs://dataproc-temp-us-central1-755035978333-4hrmajc/b46b21d4-b19e-4c37-9a35-1dd4f7ead14e/spark-job-history/application_1696955961912_0001.inprogress
```

```

CLOUD SHELL Terminal (homework-5-12345) x + 
progress: 1.0
state: FINISHED
trackUrl: http://pi2018-dplab-m:8088/proxy/application_169695596132_0001/
pi2018@cloudshell:~ (homework-5-12345)$ gcloud dataproc jobs list --cluster $homework5
JOB ID: ae563c5e1d54f1099f9466fc151c58a
TYPE: spark
STATUS: DONE
pi2018@cloudshell:~ (homework-5-12345)$ gcloud dataproc jobs wait ae363c5e1de54f1099f9466fc151c58a
Waiting for job output...
Waiting for job output...
23/1/10 16:38:04 INFO org.apache.spark.SparkKvNv: Registering MapOutputTracker
23/1/10 16:38:04 INFO org.apache.spark.SparkKvNv: Registering BlockManagerMaster
23/1/10 16:38:04 INFO org.apache.spark.SparkKvNv: Registering BlockManagerMasterHeartbeat
23/1/10 16:38:05 INFO org.apache.spark.SparkKvNv: Registering OutputCommitCoordinator
23/1/10 16:38:05 INFO org.apache.spark.SparkKvNv: Logging initialized @4293ms to org.sparkproject.jetty.util.log.Slf4jLog
23/1/10 16:38:05 INFO org.apache.sparkproject.jetty.server.Server: jetty-9.4.40-x20210413; built: 2021-04-13T20:42:42.668Z; git: d881a572662e1943a14ae12e7e120798
9:21:874: jvm 1.8.0_382-b05
23/1/10 16:38:05 INFO org.apache.sparkproject.jetty.server.Server: Started 4445ms
23/1/10 16:38:05 INFO org.sparkproject.jetty.server.AbstractConnector: Started ServerConnector@f1549bba7[HTTP/1.1, (http/1.1)](0.0.0.0:35893)
23/1/10 16:38:05 INFO org.apache.hadoop.http.HttpServer2: Starting at pi2018-dplab-m/10.128.0.3:8032
23/1/10 16:38:06 INFO org.apache.hadoop.yarn.Client.AHSProxy: Connecting to Application History server at pi2018-dplab-m/10.128.0.3:10200
23/1/10 16:38:07 INFO org.apache.hadoop.conf.Configuration: resource-types.xml not found
23/1/10 16:38:07 INFO org.apache.hadoop.yarn.util.resource.ResourceUtils: Unable to find 'resource-types.xml'.
23/1/10 16:38:08 INFO org.apache.hadoop.yarn.client.api.impl.YarnClientImpl: Submitted application application_169695596132_0001
23/1/10 16:38:11 INFO org.apache.hadoop.yarn.client.RMProxy: Connecting to ResourceManager at pi2018-dplab-m/10.128.0.3:8030
23/1/10 16:38:12 INFO org.google.cloud.hadoop.hdfs.GfsStorageStatistics: Detected potential high latency for operation op_get_file status, latencyMs=39
9: previousMaxLatencyMs=0; operationCount=1; context=g://dataproc-temp-us-central1-755035978333-4hrgmajc/b4621d4-b19e-4c37-9a35-1dd4f7ead14e/spark-job-history
23/1/10 16:38:12 INFO com.google.cloud.hadoop.repackaged.gcs.com.google.cloud.hadoop.gcsio.GoogleCloudStorageImpl: Ignoring exception of type GoogleJsonResourceException; verified object already exists with desired state.
23/1/10 16:38:12 INFO com.google.cloud.hadoop.fs.gcs.GfsStorageStatistics: Detected potential high latency for operation op_mkdirs, latencyMs=226; previousMaxLatencyMs=0; operationCount=1; context=g://dataproc-temp-us-central1-755035978333-4hrgmajc/b4621d4-b19e-4c37-9a35-1dd4f7ead14e/spark-job-history
23/1/10 16:38:13 INFO com.google.cloud.hadoop.fs.gcs.GfsStorageStatistics: Detected potential high latency for operation op_create, latencyMs=399; previousMaxLatencyMs=0; operationCount=1; context=g://dataproc-temp-us-central1-755035978333-4hrgmajc/b4621d4-b19e-4c37-9a35-1dd4f7ead14e/spark-job-history/application_169695596132_0001.inprogress
pi2018@cloudshell:~ (homework-5-12345)$ 
23/1/10 16:38:14 INFO org.apache.sparkproject.jetty.server.AbstractConnector: Stopped Spark@1549bba7[HTTP/1.1, (http://1.1)](0.0.0.0:0)
23/1/10 16:38:29 INFO org.google.cloud.hadoop.fs.gcs.GfsStorageStatistics: Detected potential high latency for operation stream_write_close operations, latencyMs=219; previousMaxLatencyMs=0; operationCount=1; context=g://dataproc-temp-us-central1-755035978333-4hrgmajc/b4621d4-b19e-4c37-9a35-1dd4f7ead14e/spark-job-history/application_169695596132_0001.inprogress

CLOUD SHELL Terminal (homework-5-12345) x + 
pi2018@cloudshell:~ (homework-5-12345)$ gcloud dataproc clusters describe $homework5
clusterName: pi2018-dplab
clusterUuid: b4621d4-b19e-4c37-9a35-1dd4f7ead14e
config:
  configBucket: dataproc-staging-us-central1-755035978333-dvdnjf04
  endpointConfig: {}
  gcClusterConfig:
    internallyOnly: false
    networkUri: https://www.googleapis.com/compute/v1/projects/homework-5-12345/global/networks/default
    serviceAccountScopes:
      - https://www.googleapis.com/auth/cloud-platform
      - https://www.googleapis.com/auth/useraccounts.readonly
      - https://www.googleapis.com/auth/devstorage.read_write
      - https://www.googleapis.com/auth/logging.write
    tags:
      - codeLab
    zoneUri: https://www.googleapis.com/compute/v1/projects/homework-5-12345/zones/us-central1-c
  masterConfig:
    diskConfig:
      bootDiskSizeGb: 1000
      bootDiskType: pd-standard
      imageUri: https://www.googleapis.com/compute/v1/projects/cloud-dataproc/global/images/dataproc-2-0-deb10-20231001-111635-rc01
    instanceNames:
      - pi2018-dplab-m
    machineTypeUri: https://www.googleapis.com/compute/v1/projects/homework-5-12345/zones/us-central1-c/machineTypes/n1-standard-4
    minCpuPlatform: AUTOMATIC
    minInstances:
    preemtibility: NON_PREEMPTIBLE
  softwareConfig:
    imageVersion: 2.0.79-debian10
  properties:
    capacityScheduler.yarn.scheduler.capacity.root.default.ordering-policy: fair
    core.fs.gs.metadata.cache.enable: 'false'
    core:hadoop.ssl.enabled.protocols: TLSv1,TLSv1.1,TLSv1.2
    distcp:mapreduce.map.java.opts: '-Xmx768m
    distcp:mapreduce.map.memory.mb: '1024'
    distcp:mapreduce.reduce.java.opts: '-Xmx68m
    distcp:mapreduce.reduce.memory.mb: '1024'

pi2018@cloudshell:~ (homework-5-12345)$ gcloud dataproc clusters update $homework5 --num-secondary-workers=1
Waiting for cluster update operation...done.
Updated [https://dataproc.googleapis.com/v1/projects/homework-5-12345/regions/us-central1/clusters/pi2018-dplab].
pi2018@cloudshell:~ (homework-5-12345)$ gcloud dataproc clusters describe $homework5
clusterName: pi2018-dplab
clusterUuid: b4621d4-b19e-4c37-9a35-1dd4f7ead14e
config:
  configBucket: dataproc-staging-us-central1-755035978333-dvdnjf04
  endpointConfig: {}
  gcClusterConfig:
    internallyOnly: false
    networkUri: https://www.googleapis.com/compute/v1/projects/homework-5-12345/global/networks/default
    serviceAccountScopes:
      - https://www.googleapis.com/auth/cloud-platform
      - https://www.googleapis.com/auth/useraccounts.readonly
      - https://www.googleapis.com/auth/devstorage.read_write
      - https://www.googleapis.com/auth/logging.write
    tags:
      - codeLab
    zoneUri: https://www.googleapis.com/compute/v1/projects/homework-5-12345/zones/us-central1-c
  masterConfig:
    diskConfig:
      bootDiskSizeGb: 1000
      bootDiskType: pd-standard
      imageUri: https://www.googleapis.com/compute/v1/projects/cloud-dataproc/global/images/dataproc-2-0-deb10-20231001-111635-rc01
    instanceNames:
      - pi2018-dplab-m
    machineTypeUri: https://www.googleapis.com/compute/v1/projects/homework-5-12345/zones/us-central1-c/machineTypes/n1-standard-4
    minCpuPlatform: AUTOMATIC
    numInstances:
    preemtibility: NON_PREEMPTIBLE
  secondaryWorkerConfig:
    diskConfig:

```

CLOUD SHELL Terminal (homework-5-12345) + - Open Editor

```

pi2018@cloudshell:~ (homework-5-12345)$ gcloud compute ssh $homework5-m --zone=us-central1-c
WARNING: The private SSH key file for gcloud does not exist.
WARNING: The public SSH key file for gcloud does not exist.
WARNING: You do not have an SSH key for gcloud.
WARNING: SSH keygen will be executed to generate a key.
This tool needs to create the directory [/home/pi2018/.ssh] before being able to generate SSH keys.

Do you want to continue (Y/n)? Y

Generating public/private rsa key pair.
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /home/pi2018/.ssh/google_compute_engine
Your public key has been saved in /home/pi2018/.ssh/google_compute_engine.pub
The key fingerprint is:
SHA256:i0gBW2kLluadudiTcAUPHNpCXYk4YZcvb7FLZqPek pi2018cs-991029847797-default
The key's randomart image is:
+---[RSA 3072]---+
| .B+EO |
| o = B+=o |
| + * o += O.o |
| o = . o ... =.o |
| o . S . . . . |
| . . . o . . |
| . . . o . . |
| . . . o . . |
| . . . o . . |
| . . . o . . |
+---[SHA256]-----+
Updating project ssh metadata...working.Updated [https://www.googleapis.com/compute/v1/projects/homework-5-12345].
Updating project ssh metadata...done.
Waiting for SSH key to propagate.
Warning: Permanently added 'compute.4967747146943611543' (ECDSA) to the list of known hosts.
Linux pi2018-dplab-m 5.10.0-0.deb10.16-cloud-amd64 #1 SMP Debian 5.10.127-2-pp010+1 (2022-07-28) x86_64

The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/*copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent

```

CLOUD SHELL Terminal (homework-5-12345) + - Open Editor

```

| + * o += O.o |
| o = . o ... =.o |
| o . S . . . . |
| . . . o . . |
| . . . o . . |
| . . . o . . |
+---[SHA256]-----+
Updating project ssh metadata...working.Updated [https://www.googleapis.com/compute/v1/projects/homework-5-12345].
Updating project ssh metadata...done.
Waiting for SSH key to propagate.
Warning: Permanently added 'compute.4967747146943611543' (ECDSA) to the list of known hosts.
Linux pi2018-dplab-m 5.10.0-0.deb10.16-cloud-amd64 #1 SMP Debian 5.10.127-2-pp010+1 (2022-07-28) x86_64

The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/*copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
pi2018@pi2018-dplab-m:~$ hostname
pi2018-dplab-m
pi2018@pi2018-dplab-m:~$ gcloud dataproc clusters list
ERROR: (gcloud.dataproc.clusters.list) The required property [region] is not currently set.
It can be set on a per-command basis by re-running your command with the [--region] flag.

You may set it for your current workspace by running:

$ gcloud config set dataproc/region VALUE
or it can be set temporarily by the environment variable [CLOUDSDK_DATAPROC_REGION]
pi2018@pi2018-dplab-m:~$ gcloud config set dataproc/region us-central1
Updated property [dataproc/region].
pi2018@pi2018-dplab-m:~$ gcloud dataproc clusters list
NAME          PLATFORM PRIMARY_WORKER_COUNT SECONDARY_WORKER_COUNT STATUS      ZONE          SCHEDULED_DELETE
pi2018-dplab   GCE           2                   1           RUNNING    us-central1-c
pi2018@pi2018-dplab-m:~$ logout
Connection to 34.42.86.98 closed.
pi2018@cloudshell:~ (homework-5-12345)$

```

CLOUD SHELL Terminal (homework-5-12345) + - Open Editor

```

pi2018@cloudshell:~ (homework-5-12345)$ gcloud compute instances describe $homework5-m --zone us-central1-c
cpuPlatform: Intel Haswell
creationTimestamp: '2023-10-10T09:31:53.591-07:00'
deletionProtection: false
diskSizeGb: 1000
disks:
- autoDelete: true
  boot: true
  deviceName: persistent-disk-0
  diskSizeGb: '1000'
  guestOsFeatures:
  - type: UEFI_COMPATIBLE
  - type: VIRTIO_SCSI_MULTIQUEUE
  index: 0
  interface: SCSI
  kind: compute#attachedDisk
  licenses:
  - https://www.googleapis.com/compute/v1/projects/cloud-dataproc/global/licenses/datapro
  mode: READ_WRITE
  source: https://www.googleapis.com/compute/v1/projects/homework-5-12345/zones/us-central1-c/disks/pi2018-dplab-m
  type: PERSISTENT
  fingerprint: z.e7Myz15I-
  id: '4967747146943611543'
  kind: compute#instance
  labelFingerprint: PDWxnswoDC0=
labels:
  goog-dataproc-cluster-name: pi2018-dplab
  goog-dataproc-cluster-uid: b46b21d4-b19e-4c37-9a35-1dd4f7ead14e
  goog-dataproc-location: us-central
lastStartTimestamp: '2023-10-10T09:32:01.383-07:00'
machineType: https://www.googleapis.com/compute/v1/projects/homework-5-12345/zones/us-central1-c/machineTypes/n1-standard-4
metadata:
  items:
  - key: dataproc-bucket
    value: dataproc-staging-us-central1-755035978333-dvdnjf04
  - key: dataproc-cloud-logging-enabled
    value: 'false'
  - key: dataproc-cluster-configuration-directory
    value: gs://dataproc-staging-us-central1-755035978333-dvdnjf04/google-cloud-dataproc-metainfo/b46b21d4-b19e-4c37-9a35-1dd4f7ead14e/

```

```
CLOUD SHELL
Terminal (homework-5-12345) x + ▾

- codeLab
zone: https://www.googleapis.com/compute/v1/projects/homework-5-12345/zones/us-central1-c
pi2018@cloudshell:~ (homework-5-12345)$ gcloud compute firewall-rules list
NAME: default-allow-icmp
NETWORK: default
DIRECTION: INGRESS
PRIORITY: 65534
ALLOW: icmp
DENY:
DISABLED: False

NAME: default-allow-internal
NETWORK: default
DIRECTION: INGRESS
PRIORITY: 65534
ALLOW: tcp:0-65535,udp:0-65535,icmp
DENY:
DISABLED: False

NAME: default-allow-rdp
NETWORK: default
DIRECTION: INGRESS
PRIORITY: 65534
ALLOW: tcp:3389
DENY:
DISABLED: False

NAME: default-allow-ssh
NETWORK: default
DIRECTION: INGRESS
PRIORITY: 65534
ALLOW: tcp:22
DENY:
DISABLED: False

To show all fields of the firewall, please show in JSON format: --format=json
To show all fields in table format, please see the examples in --help.

pi2018@cloudshell:~ (homework-5-12345)$ █

pi2018@cloudshell:~ (homework-5-12345)$ gcloud dataproc clusters delete $homework5 --region us-central1
The cluster 'pi2018-dplab' and all attached disks will be deleted.

Do you want to continue (Y/n)? Y

Waiting on operation [projects/homework-5-12345/regions/us-central1/operations/547ic0f6-37b2-3ece-a0e0-49a4ad227083].
Waiting for cluster deletion operation...done.
Deleted [https://dataproc.googleapis.com/v1/projects/homework-5-12345/regions/us-central1/clusters/pi2018-dplab].
pi2018@cloudshell:~ (homework-5-12345)$
```