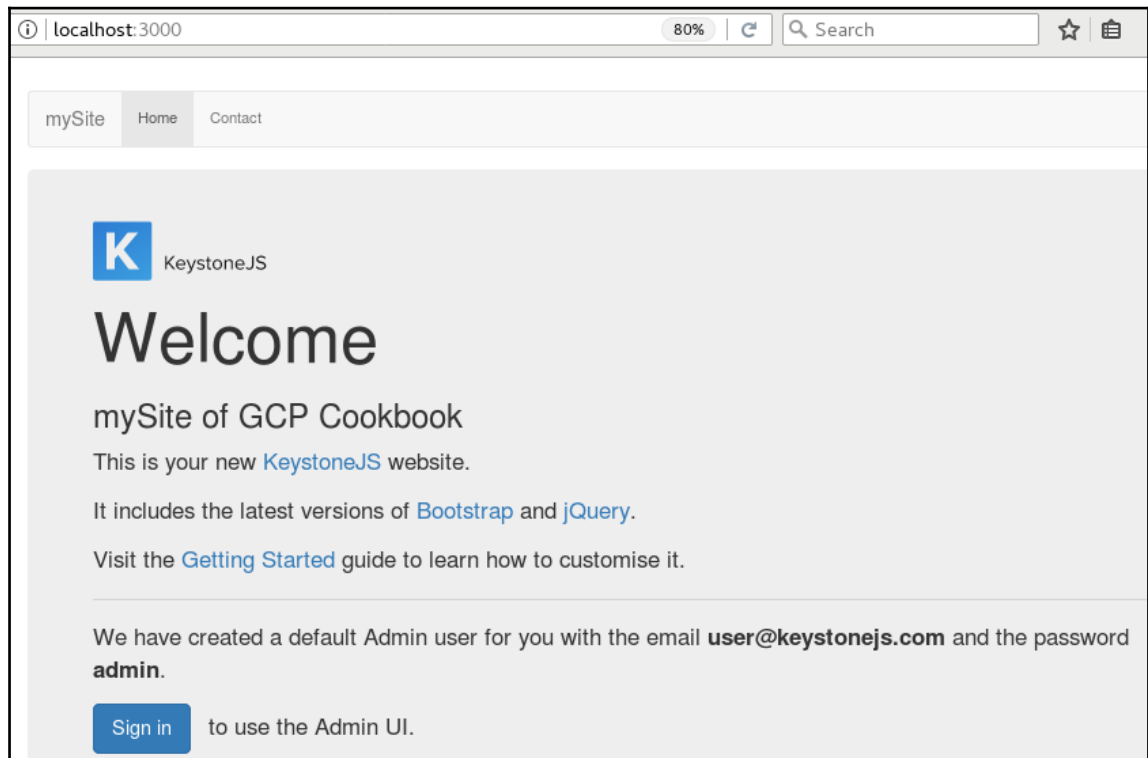
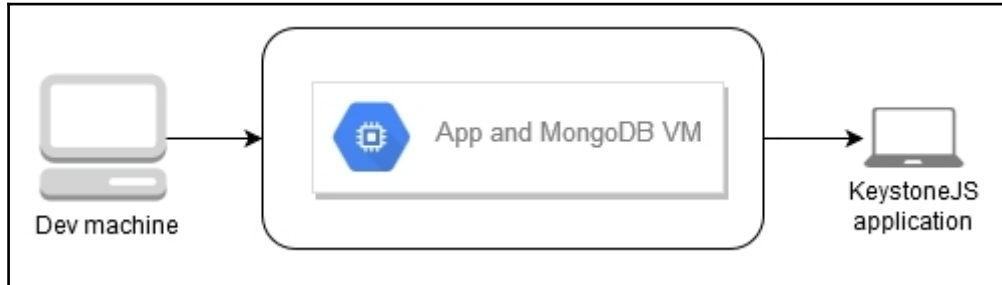


Chapter 1: Compute



Google Cloud Platform GCP Cookbook

Source Repositories **Repositories** [+ CREATE REPOSITORY](#)

- Source code
- Repositories**
- Tools & plugins

Google Cloud Platform GCP Cookbook

Source Repositories **Source code** gcpcookbook

Source code
Repositories
Tools & plugins

Push code from a local Git repository to your Cloud Repository

Choose this option if you have existing code in a local Git repository.
Select your preferred authentication method:
Google Cloud SDK (recommended)

1. Install [Google Cloud SDK](#)
2. Use the following commands to authenticate:
Linux/Mac OS X

```
$ gcloud init && git config credential.helper gcloud.sh
```
3. Add your Cloud Repository as a remote:

```
$ git remote add google \
  https://source.developers.google.com/p/gcp-cookbook/r/gcpcookbook
```
4. Push from your local Git repository:

```
$ git push --all google
```

Repositories [+ CREATE REPOSITORY](#)

<input type="checkbox"/> Repository Name ^	Clone URL
<input type="checkbox"/> gcpcookbook	http://source.developers.google.com/p/gcp-cookbook/r/gcpcookbook

← Firewall rule details EDIT DELETE

default-allow-http-3000

Description
Allow port 3000 access to mysite-server

Network
default

Priority
1000

Direction
Ingress

Action on match
Allow

Targets

Target tags	mysite-server
-------------	---------------

Source filters

IP ranges	0.0.0.0/0
-----------	-----------

Protocols and ports
tcp:3000

<input type="checkbox"/> Name ^	Zone	Recommendation	Internal IP	External IP	Connect
<input checked="" type="checkbox"/> mysite-instance	us-east1-c		10.142.0.2	10.142.1.254.1.1	SSH ⌵

← Firewall rule details EDIT DELETE

default-allow-mongo-27017

Description
Allow port 27017 access to mysite-server

Network
default

Priority
1000

Direction
Ingress

Action on match
Allow

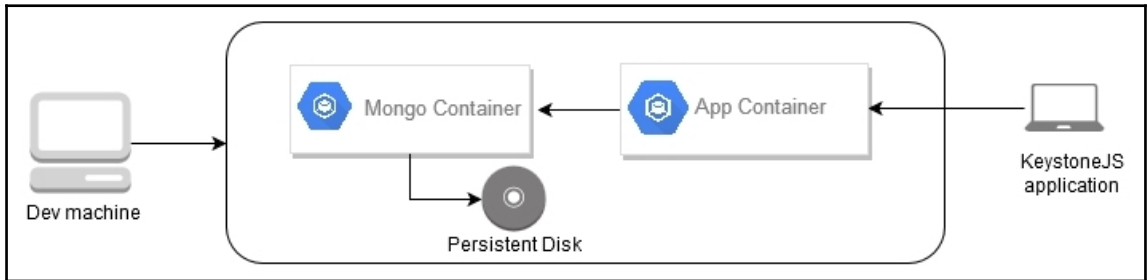
Targets

Target tags	mysite-server
-------------	---------------

Source filters

IP ranges	0.0.0.0/0
-----------	-----------

Protocols and ports
tcp:27017



Container clusters + CREATE CLUSTER ↻ REFRESH 🗑 DELETE

Filter by label or name

Container clusters

<input type="checkbox"/> Name ^	Zone	Cluster size	Total cores	Total memory	Node version	Notifications	Labels
<input checked="" type="checkbox"/> mysite-cluster	us-east1-c	2	2 vCPUs	7.50 GB	1.7.6		

Connect ✎ 🗑

(...) Cloud Functions Overview + CREATE FUNCTION ↻ REFRESH 🗑 DELETE 📄 COPY

Filter functions Columns ▾

<input type="checkbox"/> Name ^	Region	Trigger	Memory allocated	Executed function	Last deployed
<input checked="" type="checkbox"/> calculator	us-central1	HTTP trigger	256 MB	calculator	

```

▶ [λ] 10:31:09.637 calculator lg0mh0crh8vw Function execution started
▶ [i] 10:31:09.704 calculator lg0mh0crh8vw Received number1 1
▶ [i] 10:31:09.712 calculator lg0mh0crh8vw Received operand mul
▶ [i] 10:31:09.712 calculator lg0mh0crh8vw Received number2 2
▶ [i] 10:31:09.712 calculator lg0mh0crh8vw The Result is: 2
▶ [λ] 10:31:09.714 calculator lg0mh0crh8vw Function execution took 78 ms, finished with status code: 200

```



SQL



Create a MySQL Second Generation instance

Instance ID

Cannot be changed later. Use lowercase letters, numbers, and hyphens. Start with a letter.

Root password

Set a password for the root user. [Learn more](#)



Generate

No password

Location ?

For better performance, keep your data close to the services that need it.

Region

Zone

[Show configuration options](#)

Create

Cancel

<input type="checkbox"/> Instance ID ?	Type	IP address	Instance connection name
<input checked="" type="checkbox"/> mysql	MySQL 2nd Gen 5.7	35.190.175.176	gcp-cookbook:us-east1:mysql

Instance templates

[CREATE INSTANCE TEMPLATE](#)

[REFRESH](#)

[COPY](#)

[CREATE INSTANCE GROUP](#)

[DELETE](#)

[Columns](#)

<input type="checkbox"/> Name [^]	Machine type	Image	Disk type	In use by	Creation time
<input type="checkbox"/> my-php-templ	1 vCPU, 1.7 GB	debian-8	Standard persistent disk		Oct 27, 2017, 5:36:50 AM

Instance groups [CREATE INSTANCE GROUP](#) [REFRESH](#) [EDIT](#) [DELETE](#)

Filter instance groups Columns

<input type="checkbox"/> Name ^	Zone	Creation time	Instances	Template	Recommendation	Autoscaling	In use by
<input checked="" type="checkbox"/> my-php-group	us-east1-c	Oct 30, 2017, 2:40:01 AM	2	my-php-templ		Off	

[←](#) Health checks [EDIT](#) [DELETE](#)

php-health-check

In use by
Not used

Path
/public/index.php

Protocol
HTTP

Port
80

Interval
5 seconds

Timeout
5 seconds

Unhealthy threshold
2 consecutive failures

Healthy threshold
2 consecutive successes

← New HTTP(S) load balancer	Creating a HTTP(S) load balancer
<p data-bbox="171 296 247 317">Name ⓘ</p> <input data-bbox="171 326 698 361" type="text" value="my-php-lb"/>	<p data-bbox="764 335 1077 361">A HTTP(S) load balancer has 3 parts:</p> <ol data-bbox="793 388 1259 670" style="list-style-type: none"><li data-bbox="793 388 1259 458">1. Backend configuration A backend service directs incoming traffic to an instance group. You can also use a storage bucket to serve content.<li data-bbox="793 485 1259 573">2. Host and path rules Host and path rules determine how your traffic will be directed. If you don't specify any rules, traffic will be sent to the default backend service.<li data-bbox="793 599 1259 670">3. Frontend configuration Your IP address, protocol and port. This is the IP to which your client requests will come in to.
<p data-bbox="174 441 553 502"><input type="checkbox"/> Backend configuration You have not configured your backend yet</p> <p data-bbox="174 555 567 617"><input type="checkbox"/> Host and path rules Requests will be sent to the default backend</p> <p data-bbox="174 670 436 732"><input type="checkbox"/> Frontend configuration Your frontend is configured</p> <p data-bbox="174 784 400 846"><input type="checkbox"/> ⓘ Review and finalize Optional</p> <p data-bbox="174 908 334 943"><input type="button" value="Create"/> <input type="button" value="Cancel"/></p>	

Create backend service

Name ?

[Description](#)

Protocol: HTTP Named port: http Timeout: 30 seconds

Backends

my-php-group (Zone: us-east1-c, Port: 80)	Not saved	
---	-----------	--

[+ Add backend](#)

Health check ?

php-health-check (HTTP)

port: 80, timeout: 5s, check interval: 5s, unhealthy threshold: 2 attempts

Session affinity ? **Affinity cookie TTL** ?

None	0	seconds
------	---	---------

[Advanced configurations](#)

Cloud CDN ?

Enable Cloud CDN

Security

← New HTTP(S) load balancer

Name ⓘ

- ✔ **Backend configuration**
You have configured 1 backend(s)
- ✔ **Host and path rules**
You have created host and path rules
- ✔ **Frontend configuration**
Your frontend is configured

ⓘ **Review and finalize** Optional →

Create
Cancel

Review and finalize

Backend

Backend services

1. my-php-be-service
 Endpoint protocol: **HTTP** Named port: **http** Timeout: **30 seconds** Health check: **php-health-check** Session affinity: **None**
 Cloud CDN: **disabled**

⌵ [Advanced configurations](#)

This backend service has no backends configured

Instance group	Zone	Autoscaling	Balancing mode	Capacity
my-php-group	us-east1-c	Off	Max CPU: 80%	100%

Host and path rules

Hosts	Paths	Backend
All unmatched (default)	All unmatched (default)	my-php-be-service

Frontend

Protocol	IP:Port	Certificate
HTTP	EPHEMERAL:80	—

Load balancing [+ CREATE LOAD BALANCER](#) [REFRESH](#)

Load balancer	Protocol																								
<p>✓ my-php-lb</p> <p>Details Monitoring Caching</p> <p>Frontend</p> <table border="1"> <thead> <tr> <th>Protocol ^</th> <th>IP:Port</th> <th>Certificate</th> </tr> </thead> <tbody> <tr> <td>HTTP</td> <td>35.201.89.5:80</td> <td>—</td> </tr> </tbody> </table> <p>Host and path rules</p> <table border="1"> <thead> <tr> <th>Hosts ^</th> <th>Paths</th> <th>Backend</th> </tr> </thead> <tbody> <tr> <td>All unmatched (default)</td> <td>All unmatched (default)</td> <td>my-php-be-service</td> </tr> </tbody> </table> <p>Backend</p> <p>Backend services</p> <p>1. my-php-be-service</p> <p>Endpoint protocol: HTTP Named port: http Timeout: 30 seconds Health check: php-health-check Session affinity: None Cloud CDN: disabled</p> <p>Advanced configurations</p> <p>This backend service has no backends configured</p> <table border="1"> <thead> <tr> <th>Instance group ^</th> <th>Zone</th> <th>Healthy</th> <th>Autoscaling</th> <th>Balancing mode</th> <th>Capacity</th> </tr> </thead> <tbody> <tr> <td>my-php-group</td> <td>us-east1-c</td> <td>2 / 2</td> <td>Off</td> <td>Max CPU: 80%</td> <td>100%</td> </tr> </tbody> </table>		Protocol ^	IP:Port	Certificate	HTTP	35.201.89.5:80	—	Hosts ^	Paths	Backend	All unmatched (default)	All unmatched (default)	my-php-be-service	Instance group ^	Zone	Healthy	Autoscaling	Balancing mode	Capacity	my-php-group	us-east1-c	2 / 2	Off	Max CPU: 80%	100%
Protocol ^	IP:Port	Certificate																							
HTTP	35.201.89.5:80	—																							
Hosts ^	Paths	Backend																							
All unmatched (default)	All unmatched (default)	my-php-be-service																							
Instance group ^	Zone	Healthy	Autoscaling	Balancing mode	Capacity																				
my-php-group	us-east1-c	2 / 2	Off	Max CPU: 80%	100%																				

← Instance groups EDIT GROUP ROLLING UPDATE

Instance template ?
my-php-tmpl

Autoscaling ?
On

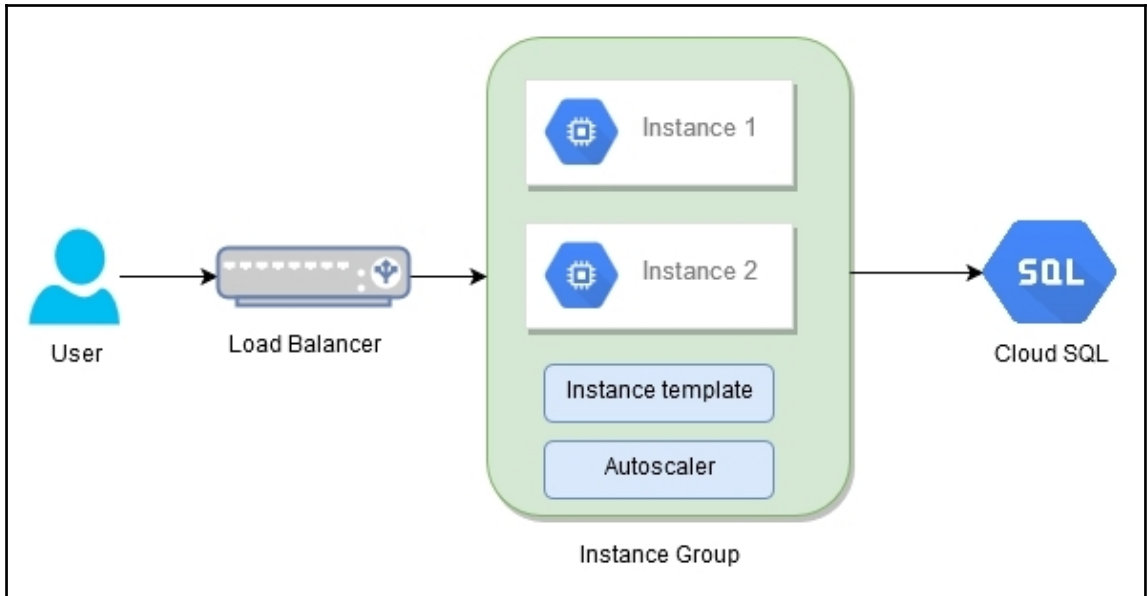
Autoscale based on ?
For best results read [Configuring autoscaling instance groups](#)
CPU usage

Target CPU usage ?
Scaling dynamically creates or deletes VMs to meet the group target. [Learn more](#)
60 %

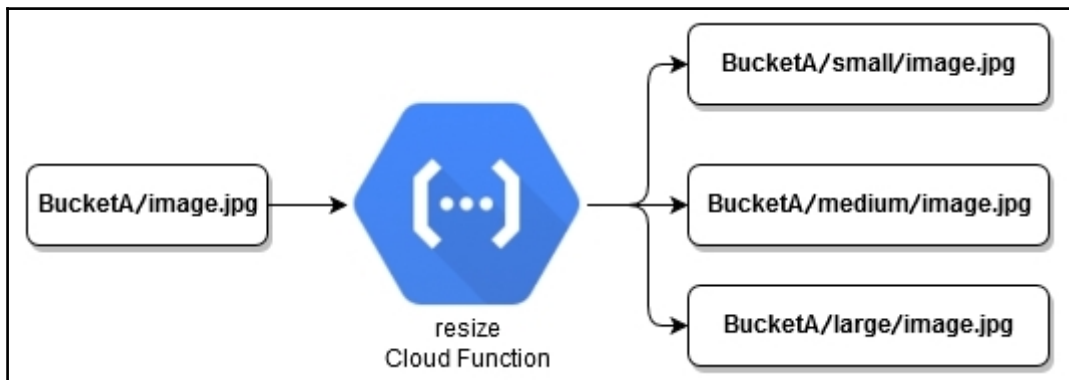
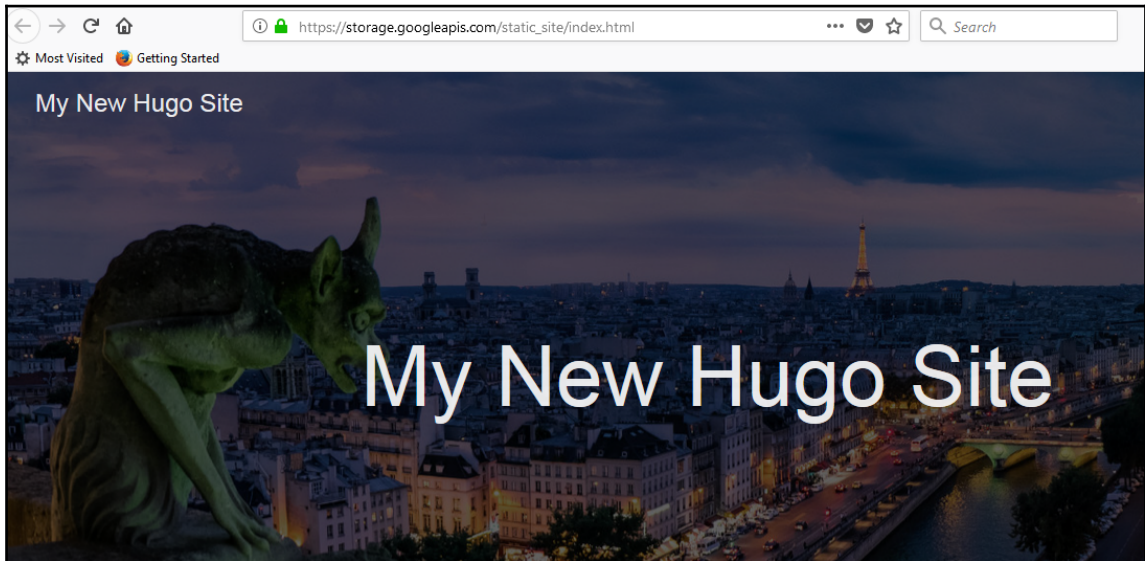
Minimum number of instances ?
2

Maximum number of instances ?
10

Cool-down period ?
60 seconds







Chapter 2: Storage and Databases



<input type="checkbox"/> Name	Region	Trigger	Memory allocated	Executed function	Last deployed ▼
<input checked="" type="checkbox"/> imageresize	us-central1	bucket: uploadtestbuckt	256 MB	imageresize	11/23/17, 1:23 AM ⋮

[Buckets](#) / uploadtestbuckt

<input type="checkbox"/> Name	Size	Type	Storage class
<input type="checkbox"/>  large/	–	Folder	–
<input type="checkbox"/>  medium/	–	Folder	–
<input type="checkbox"/>  small/	–	Folder	–

 **Create an instance**

Instance name
For display purposes only.

Instance ID
Unique identifier for instance. Permanent.

Configuration
Choose a regional location for your instance configuration. Determines where your nodes are located. For better performance, keep nodes close to the applications that will use your databases.

Nodes
Add nodes to increase data throughput and queries per second (QPS). Affects billing.

[Node guidance](#)

Cost
Storage cost depends on GB stored per month. Nodes cost is an hourly charge for the number of nodes in your instance. [Learn more](#)

Nodes cost	Storage cost
\$0.90 per hour	\$0.30 per GB/month

← Instance

← Database details [QUERY](#) [CREATE TABLE](#) [DELETE](#)

org_dev_instance

- org
 - Query
 - employees
 - officeCode
 - reportsTo
 - offices

org

Overview Monitor

CPU utilization (mean) 2.52%	Operations Read: 0.05/s Write: 0.00/s	Throughput Read: 0 B/s Write: 0 B/s	Total storage 0 B
--	--	--	-----------------------------

Tables

Name	Indexes	Interleaved in
employees	2	offices
offices	-	-

[Show equivalent DDL](#)

employees

Schema [Indexes \(2\)](#) [Data](#)

[Insert](#) [Edit](#) [Delete](#)

Filter by primary key

<input type="checkbox"/>	officeCode <input type="checkbox"/>	employeeNumber <input type="checkbox"/>	email	extension	firstName	jobTitle	lastName	reportsTo
<input type="checkbox"/>	1	1002	dmurphy@classicmodelcars.com	x5800	Diane	President	Murphy	<NULL>
<input type="checkbox"/>	1	1056	mpatterson@classicmodelcars.com	x4611	Mary	VP Sales	Patterson	1002
<input type="checkbox"/>	1	1076	jfirrelli@classicmodelcars.com	x9273	Jeff	VP Marketing	Firrelli	1002
<input type="checkbox"/>	1	1143	abow@classicmodelcars.com	x5428	Anthony	Sales Manager (NA)	Bow	1056
<input type="checkbox"/>	1	1165	ljennings@classicmodelcars.com	x3291	Leslie	Sales Rep	Jennings	1143
<input type="checkbox"/>	1	1166	lthompson@classicmodelcars.com	x4065	Leslie	Sales Rep	Thompson	1143
<input type="checkbox"/>	2	1188	jfirrelli@classicmodelcars.com	x2173	Julie	Sales Rep	Firrelli	1143
<input type="checkbox"/>	2	1216	spatterson@classicmodelcars.com	x4334	Steve	Sales Rep	Patterson	1143



A Cloud Bigtable instance is a container for your cluster. Choose the instance and cluster properties below.

Instance properties

Instance name

For display purposes only.

Instance ID

ID is permanent. Use lowercase letters, numbers, or hyphens.

Instance type

Production (recommended)

Minimum of 3 nodes. High availability. Cannot downgrade later.

Development

Low-cost instance for development and testing. Does not provide high availability. Can upgrade to Production later.

Cluster properties

Cluster ID

ID is permanent. Use lowercase letters, numbers, or hyphens.

Zone

Choice is permanent. Determines where cluster data is stored. To reduce latency and increase throughput, store your data near the services that need it.

Create Dataset ✕

Dataset ID ?

Data location ?

Data expiration Never In days.

▶ HomeTemp File format Cloud

▼ **Public Datasets**

- ▶ bigquery-public-data:hacker_news
- ▶ bigquery-public-data:noaa_gsod

Create new table

Share dataset

Delete dataset

Create Table

Source Data Create from source Create empty table

Repeat job ?

Location ? ?

File format

Destination Table

Table name ?

Table type ?

Column Families ?

Column Family and Qualifiers ?	Type ?	Encoding ?	Only Read Latest ?
<input type="text" value="sensorcf1"/> +	<input type="button" value="STRING"/>	<input type="button" value="TEXT"/>	<input type="button" value="FALSE"/> X

[Edit as Text](#)

Options

Ignore unspecified column families ?

Read row key as string ?

New Query ?

```
1 SELECT
2   SUBSTR(rowkey, 5) AS timestamp,
3   SUBSTR(sensorcf1.column.cell.value,7) AS temperature_reading
4 FROM
5   [gcp-cookbook:HomeTemp.temperature]
6 WHERE
7   SUBSTR(sensorcf1.column.cell.value,7) = (
8     SELECT
9       MAX(SUBSTR(sensorcf1.column.cell.value,7))
10    FROM
11     [gcp-cookbook:HomeTemp.temperature] )
12 LIMIT
13  1
```

RUN QUERY ▾ Save Query Save View Format Query Show Options

Results	Explanation	Job Information	
Row	timestamp	temperature_reading	
1	20171201153000	34	

Table JSON

Query by kind [Query by GQL](#)

Namespace

[default]

```
1 select * from Drive
2 where empid = '121659'
```

[Run query](#) [Clear query](#) [GQL query help](#)

<input type="checkbox"/>	Name/ID	created	empid	filekey	timestamp
<input type="checkbox"/>	id=5668600916475904	2017-11-22 (09:40:27.795) IST	MTixNjU5	YjRlZjYvMjAxNzExMjEyMzEwMjYvMTixNjU5L3JlcXVpcmVtZW50cy50eHQ=	MjAxNzExMjEyMzEwMjY=
<input type="checkbox"/>	id=5682617542246400	2017-11-22 (10:02:16.601) IST	MTixNjU5	MGQ1YjEveMjAxNzExMjEyMzMyMTUvMTixNjU5L2htYWdlLmpwZw==	MjAxNzExMjEyMzMyMTU=
<input type="checkbox"/>	id=5722646637445120	2017-11-22 (08:23:17.076) IST	MTixNjU5	MThhY2QvMjAxNzExMjEyMTUzMTUvMTixNjU5L3VwbG9hZC5weQ==	MjAxNzExMjEyMTUzMTU=
<input type="checkbox"/>	id=5732568548769792	2017-11-22 (09:39:32.555) IST	MTixNjU5	YjRlZjYvMjAxNzExMjEyMzA5MzEveMTixNjU5L3JlcXVpcmVtZW50cy50eHQ=	MjAxNzExMjEyMzA5MzE=

Chapter 3: Networking

← Create a VPC network

Name ?

Description (Optional)

Subnets

Subnets let you create your own private cloud topology within Google Cloud. Click Automatic to create a subnet in each region, or click Custom to manually define the subnets. [Learn more](#)

Subnet creation mode

Custom Automatic

Name ? 🗑️ ✎

[Add a description](#)

Region ?

IP address range ?

[Create secondary IP range](#)

Private Google access ?

← Create a VPC network

Name 

beta-data

Description (Optional)

Beta Data Network for Public usage


Subnets

Subnets let you create your own private cloud topology within Google Cloud. Click Automatic to create a subnet in each region, or click Custom to manually define the subnets. [Learn more](#)

Subnet creation mode

Custom

Automatic

 These IP address ranges will be assigned to each region in your VPC network. When an instance is created for your VPC network, it will be assigned an IP from the appropriate region's address range.

Region	IP address range
us-central1	10.128.0.0/20
europa-west1	10.132.0.0/20
us-west1	10.138.0.0/20
asia-east1	10.140.0.0/20
us-east1	10.142.0.0/20

alpha-mgmt

Description
Alpha Management Network

Subnet creation mode
Custom subnets

Dynamic routing mode
Regional

Subnets Static internal IP addresses **Firewall rules** Routes VPC Network Peering

[Add firewall rule](#) [Delete](#)

<input type="checkbox"/>	Name	Type	Targets	Filters	Protocols / ports	Action	Priority
<input type="checkbox"/>	allow-ssh-alpha-servers	Ingress	alpha-server	IP ranges: 0.0.0.0/0	tcp:22	Allow	1000

beta-data

Description
Beta Data Network for Public usage

Subnet creation mode
Auto subnets

Dynamic routing mode
Regional

Subnets Static internal IP addresses **Firewall rules** Routes VPC Network Peering

[Add firewall rule](#) [Delete](#)

<input type="checkbox"/>	Name	Type	Targets	Filters	Protocols / ports	Action	Priority
<input type="checkbox"/>	allow-http-beta-servers	Ingress	beta-server	IP ranges: 0.0.0.0/0	tcp:80	Allow	1000

Equivalent REST

[←](#) Create an instance

Name [?](#)

web-instance-alpha-beta-1

Zone [?](#)

us-central1-a

Machine type

Customize to select cores, memory and GPUs.


1 vCPU 3.75 GB memory [Customize](#)

[Upgrade your account](#) to create instances with up to 96 cores

Container [?](#)

Deploy a container image to this VM instance. [Learn more](#)

Boot disk [?](#)

 New 10 GB standard persistent disk
Image
Debian GNU/Linux 9 (stretch) [Change](#)

Identity and API access [?](#)

Service account [?](#)

Compute Engine default service account

Access scopes [?](#)

Allow default access
 Allow full access to all Cloud APIs
 Set access for each API

Management Disks Networking SSH Keys

Description (Optional)

webservice with 2 NICs

Labels ? (Optional)

+ Add label

Automation

Startup script (Optional)

You can choose to specify a startup script that will run when your instance boots up or restarts. Startup scripts can be used to install software and updates, and to ensure that services are running within the virtual machine. [Learn more](#)

```
#!/bin/bash
apt-get update
apt-get install -y apache2
cat <<EOF > /var/www/html/index.html
<html><body><h1>Hello World</h1>
<p>Web server on the alpha and beta networks</p>
</body></html>
EOF
```

Management Disks **Networking** SSH Keys

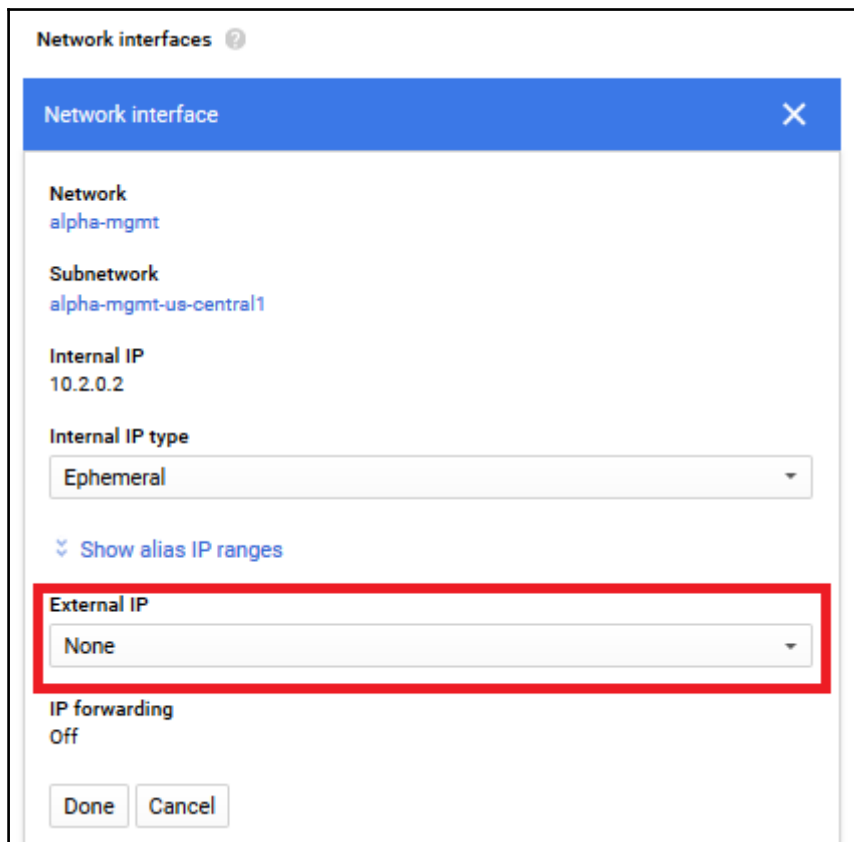
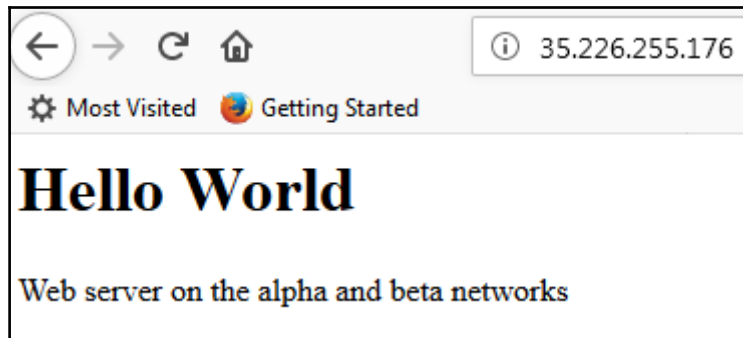
Network tags ? (Optional)

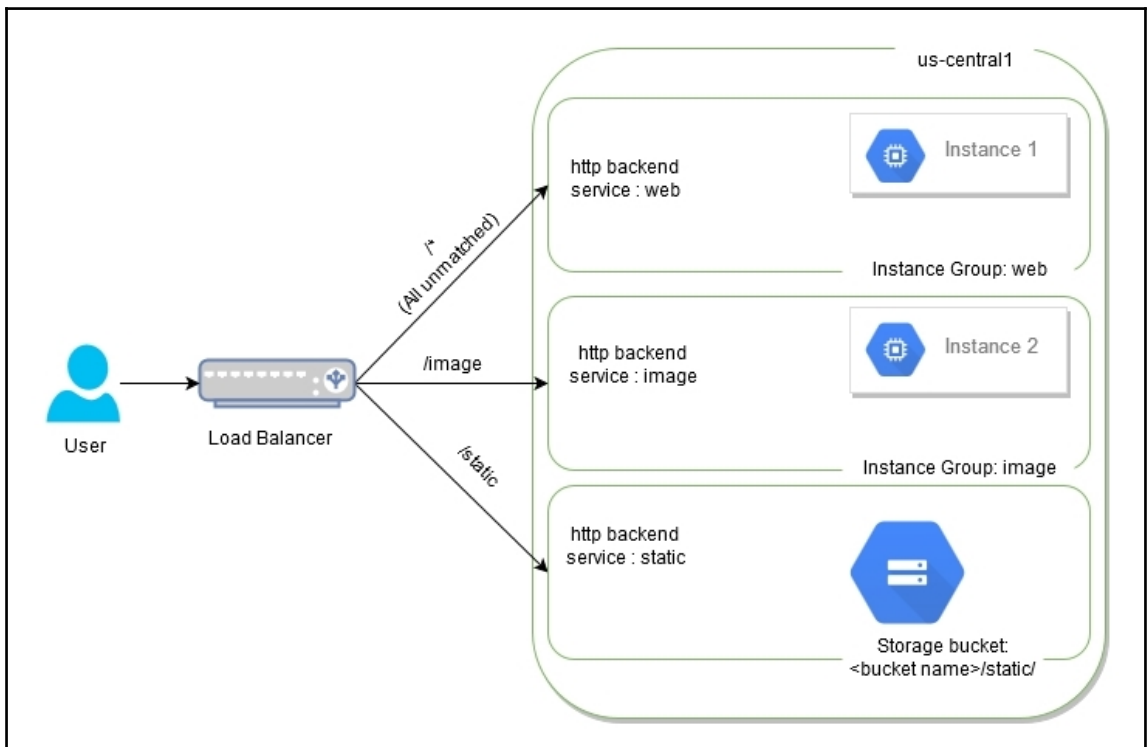
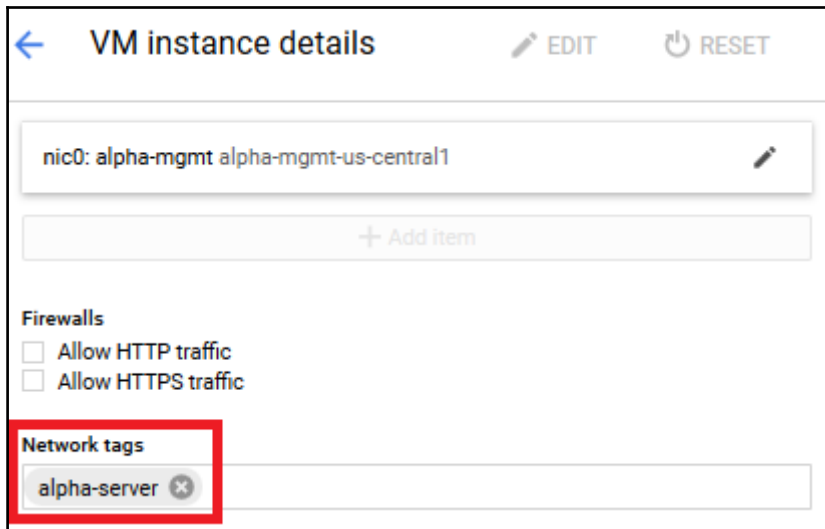
alpha-server x beta-server x http-server x

Network interfaces ?

alpha-mgmt	alpha-mgmt-us-central1 (10.2.0.0/24)	
beta-data	beta-data (10.128.0.0/20)	

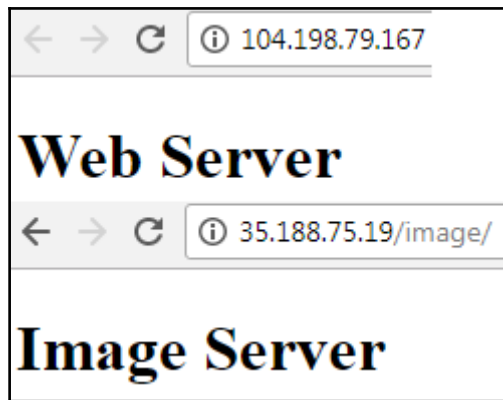
+ Add network interface





<input type="checkbox"/> Name ^	Zone	Recommendation	Internal IP	External IP	Connect
<input type="checkbox"/> image-server	us-central1-b		10.128.0.2	35.188.75.19 ↗	SSH ▾ ⋮
<input type="checkbox"/> web-server	us-central1-b		10.128.0.4	104.198.79.167 ↗	SSH ▾ ⋮

<input type="checkbox"/> Name ^	Zone	Creation time	Instances	Template	Recommendation	Autoscaling	In use by
<input type="checkbox"/> image-group	us-central1-b	Dec 29, 2017, 11:24:34 AM	1	–			
<input type="checkbox"/> web-group	us-central1-b	Dec 29, 2017, 11:19:04 AM	1	–			



<input type="checkbox"/> Name ^	Host	Path	Protocol	Port	In use by
<input type="checkbox"/> http-health-check		/	HTTP	80	

Buckets / gcp-bk-content-filtering / static

<input type="checkbox"/> Name	Size	Type	Storage class	Last modified	Share publicly
<input type="checkbox"/> GCP1.png	92.98 KB	image/png	Multi-Regional	2017-12-29 11:24:34 AM	<input checked="" type="checkbox"/> Public link

← New HTTP(S) load balancer

Name ⓘ
web-content-lb

- Backend configuration**
You have not configured your backend yet →
- Host and path rules**
Requests will be sent to the default backend
- Frontend configuration**
Your frontend is configured
- Review and finalize** ⓘ
Optional

Create **Cancel**

Backend configuration

Create or select a backend service for incoming traffic. You can add multiple backend services and backend buckets to serve different types of content.

Backend services & backend buckets

Create or select backend services & backend buckets ▾

Backend services & backend buckets

Create or select backend services & backend buckets ▾

- Backend services ▶
 - Create a backend service
- Backend buckets ▶

Create backend service

Name [?]

[Description](#)

Protocol: HTTP Named port: http Timeout: 30 seconds

Backends

Not saved

[+ Add backend](#)

Health check [?]

port: 80, timeout: 5s, check interval: 5s, unhealthy threshold: 2 attempts

Session affinity [?] Affinity cookie TTL [?]

seconds

[Advanced configurations](#)

Cloud CDN [?]

Enable Cloud CDN

Create backend bucket

Name ?

[Description](#)

Cloud Storage bucket

Cloud CDN ?

 Enable Cloud CDN





Backend configuration

Create or select a backend service for incoming traffic. You can add multiple backend services and backend buckets to serve different types of content.



Backend services & backend buckets

Create or select backend services & backend buckets 

Backend services

	Name	Instance groups		
1.	web-backend-service	1		
2.	image-backend-service	1		

Backend buckets

	Name		
1.	static-thumbnail-bucket		



Host and path rules


Host and path rules determine how your traffic will be directed. You can direct traffic to a backend service or a storage bucket. Any traffic not explicitly matched with a host and path rule will be sent to the default service selected on the first row.

Hosts	Paths	Backends	
Any unmatched (default)	Any unmatched (default)	web-backend-service	✕
* ✕	/image ✕ /image/* ✕	image-backend-service	✕
* ✕	/static/* ✕	static-thumbnail-bucket	✕

Frontend configuration

Specify an IP address, port and protocol. This IP address is the frontend IP for your clients requests. For SSL, a certificate must also be assigned.

New Frontend IP and port  

Name (Optional) 

[Add a description](#)

Protocol

IP version **IP address**

Port

Load balancing + CREATE LOAD BALANCER ↻ REFRESH

Backend

Backend services

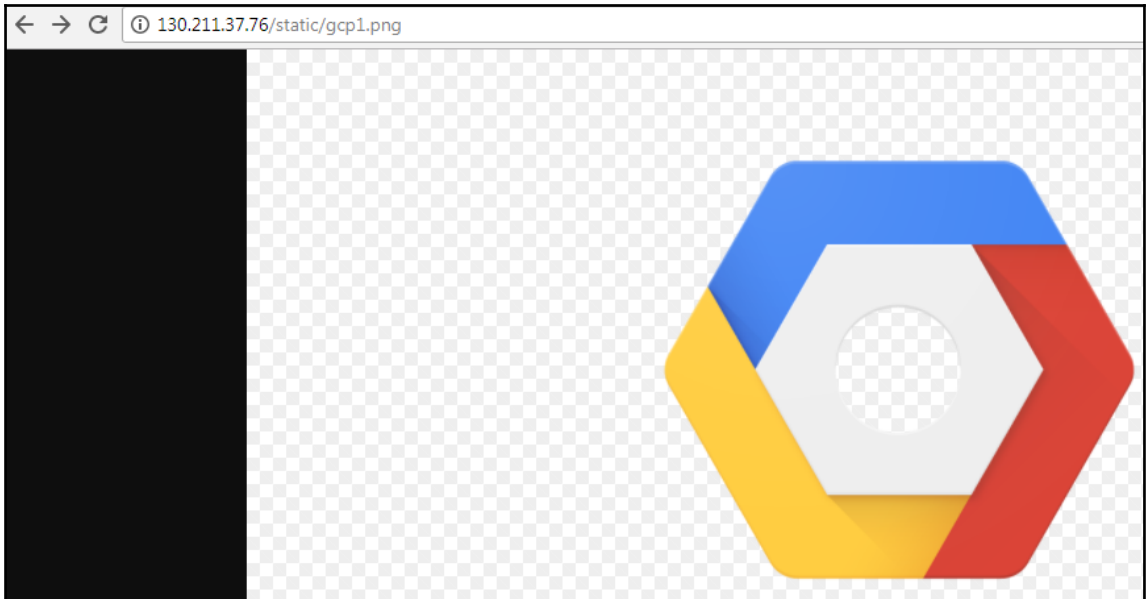
1. web-backend-service
 Endpoint protocol: HTTP Named port: http Timeout: 30 seconds Health check: http-health-check Session affinity: None Cloud CDN: disabled
 ⌵ Advanced configurations

Instance group ^	Zone	Healthy	Autoscaling	Balancing mode	Capacity
web-group	us-central1-b	1 / 1	Off	Max CPU: 80%	100%

2. image-backend-service
 Endpoint protocol: HTTP Named port: http Timeout: 30 seconds Health check: http-health-check Session affinity: None Cloud CDN: disabled
 ⌵ Advanced configurations

Instance group ^	Zone	Healthy	Autoscaling	Balancing mode	Capacity
image-group	us-central1-b	1 / 1	Off	Max CPU: 80%	100%





VPC networks [+ CREATE VPC NETWORK](#) [REFRESH](#)

Name ^	Region	Subnets	Mode	IP addresses ranges	Gateways	Firewall Rules	Global dynamic routing
alpha		1	Custom			0	Off
	us-central1	alpha-subnet-1		192.168.0.0/16	192.168.0.1		
beta		1	Custom			0	Off
	us-central1	beta-subnet-1		10.1.0.0/24	10.1.0.1		

<input type="checkbox"/> Name ^	Zone	Recommendation	Internal IP	External IP	Connect
<input type="checkbox"/> alpha-instance	us-central1-a		192.168.0.2	104.198.73.228	SSH ▾ ⋮
<input type="checkbox"/> beta-instance	us-central1-a		10.1.0.2	35.226.118.252	SSH ▾ ⋮

[←](#) Create peering connection

Name ?

Your VPC network ?

Peered VPC network
 In project upbeat-aura-163616
 In another project

VPC network name

i Your VPC network will be fully connected to the peered VPC network (full mesh topology). Routes to subnets in the peered VPC network will be automatically created.

← Create peering connection

Name [?]

Your VPC network [?]

Peered VPC network
 In project upbeat-aura-163616
 In another project

VPC network name

i Your VPC network will be fully connected to the peered VPC network (full mesh topology). Routes to subnets in the peered VPC network will be automatically created.

VPC Network Peering
[+ CREATE PEERING CONNECTION](#)
[REFRESH](#)
[DELETE](#)

<input type="checkbox"/> Name ^	Your VPC network	Peered VPC network	Peered project ID	Status
<input type="checkbox"/> alpha2beta	alpha	beta	upbeat-aura-163616	✔ Connected. ⋮
<input type="checkbox"/> beta2alpha	beta	alpha	upbeat-aura-163616	✔ Connected. ⋮

VPC networks [+ CREATE VPC NETWORK](#) [REFRESH](#)

Name ^	Region	Subnets	Mode	IP addresses ranges	Gateways	Firewall Rules	Global dynamic routing
alpha-nw	us-east1	1 alpha-subnet-vpn	Custom	10.1.0.0/16	10.1.0.1	1	Off
beta-nw	us-central1	1 beta-subnet-vpn	Custom	10.2.0.0/24	10.2.0.1	1	Off

External IP addresses [+ RESERVE STATIC ADDRESS](#) [REFRESH](#) [RELEASE STATIC ADDRESS](#)

<input type="checkbox"/> Name	External Address	Region	Type v	Version	In use by	Labels
<input type="checkbox"/> alpha-static-ip	35.185.69.191	us-east1	Static v	IPv4	None	Change
<input type="checkbox"/> beta-static-ip	35.193.66.180	us-central1	Static v	IPv4	None	Change

VM instances [+ CREATE INSTANCE](#) [IMPORT VM](#) [REFRESH](#) [START](#)

<input type="checkbox"/> Name ^	Zone	Recommendation	Internal IP	External IP	Connect
<input type="checkbox"/> alpha-instance	us-east1-c		10.1.0.2	35.196.241.176	SSH v
<input type="checkbox"/> beta-instance	us-central1-c		10.2.0.2	35.226.48.72	SSH v

← Create a VPN connection

A virtual private network lets you securely connect your Google Compute Engine resources to your own private network. Google VPN uses IKEv1 or IKEv2 to establish the IPsec connectivity. [Learn more](#)

Google Compute Engine VPN gateway

Name

Description (Optional)



Network

Region

IP address

Tunnels ?

You can have multiple tunnels to a single Peer VPN gateway

Remote peer IP address ?  

35.193.66.180

IKE version ?

IKEv2

Shared secret ?


Secretkey\$

Routing options ?

Dynamic (BGP) **Static**

Remote network IP ranges ?


Enter multiple IP address ranges (in CIDR notation) by pressing Enter after each one

10.2.0.0/24 

Local subnetworks ? (Optional)

1 selected...

Local IP ranges ?

10.1.0.0/16 

[+ Add tunnel](#)





Create



Create a VPN connection

A virtual private network lets you securely connect your Google Compute Engine resources to your own private network. Google VPN uses IKEv1 or IKEv2 to establish the IPsec connectivity. [Learn more](#)

Google Compute Engine VPN gateway

Name 	<input type="text" value="beta-vpn"/>
Description (Optional)	<input type="text" value="VPN on beta network"/> 
Network 	<input type="text" value="beta-nw"/>
Region 	<input type="text" value="us-central1"/>
IP address 	<input type="text" value="beta-static-ip (35.193.66.180)"/>

Tunnels ?

You can have multiple tunnels to a single Peer VPN gateway

Remote peer IP address ? 🗑️ ✎

35.185.69.191

IKE version ?

IKEv2

Shared secret ?

Secretkey\$

Routing options ?

Dynamic (BGP) **Static**

Remote network IP ranges ?

Enter multiple IP address ranges (in CIDR notation) by pressing Enter after each one

10.1.0.0/24 ✕

Local subnetworks ? (Optional)

1 selected...

Local IP ranges ?

10.2.0.0/24 ✕

[+ Add tunnel](#)






Create **Cancel**

VPN [+ CREATE VPN CONNECTION](#) [REFRESH](#) [DELETE](#)

<input type="checkbox"/>	Name	Network	Region	IP address	Remote peer IP address ?	Cloud routers	Logs	Firewall rules ?
<input type="checkbox"/>	alpha-vpn	alpha-nw	us-east1	35.185.69.191 ?	✔ 35.193.66.180	None	View	Configure
<input type="checkbox"/>	beta-vpn	beta-nw	us-central1	35.193.66.180 ?	✔ 35.185.69.191	None	View	Configure

Cloud VPN Gateway, alpha-vpn ▾ All logs ▾ Any log level ▾ ⌚ Last hour ▾ Jump to now

Showing logs from the last hour ending at 4:24 PM (CET)

- ▶  2018-01-13 16:23:22.239 CET sending DPD request
- ▶  2018-01-13 16:23:22.239 CET generating INFORMATIONAL request 43 []
- ▶  2018-01-13 16:23:22.239 CET sending packet: from 35.185.69.191[500] to 35.193.66.180[500] (49 bytes)
- ▶  2018-01-13 16:23:22.276 CET received packet: from 35.193.66.180[500] to 35.185.69.191[500] (49 bytes)
- ▶  2018-01-13 16:23:22.276 CET parsed INFORMATIONAL response 43 []



Create a bucket

Name

Must be unique across Cloud Storage. **Privacy:** Do not include sensitive information in your bucket name. Others can discover your bucket name if it matches a name they're trying to use.

Default storage class

- Multi-Regional**
Use to stream videos and host hot web content.
Best for data accessed frequently around the world.
- Regional**
Use to store data and run data analytics.
Best for data accessed frequently in one part of the world.
- Nearline**
Use to store rarely accessed documents.
Best for data accessed less than once per month.
- Coldline**
Use to store very rarely accessed documents.
Best for data accessed less than once per year.


Regional location

Redundant within a single region.

 Specify labels

```
index.html x
1 <html>
2 <body>
3   <h1>Index file to test CDN </h1>
4 </body>
5 </html>
```

Buckets / static-site-cdn-test

<input type="checkbox"/>	Name	Size	Type	Storage class
<input type="checkbox"/>	 index.html	71 B	text/html	Regional



New HTTP(S) load balancer

Name

Backend configuration
You have not configured your backend yet →

Host and path rules
Requests will be sent to the default backend

Backend configuration


Create or select a backend service for incoming traffic. You can add multiple backend services and backend buckets to serve different types of content.

Backend services & backend buckets

Create or select backend services & backend buckets ▾

- Backend services ▶
- Backend buckets ▶
 - Create a backend bucket

Create backend bucket

Name 

⌵ Description

Cloud Storage bucket

 static-site-cdn-test


Browse

Load balancing

[+ CREATE LOAD BALANCER](#)[REFRESH](#)[Load balancers](#)[Backends](#)[Frontends](#)

Load balancer

Protocol

 **static-site-lb**[Details](#)[Monitoring](#)[Caching](#)

Frontend

[Protocol](#) ^

IP:Port

Certificate

HTTP

35.186.217.96:80

—

Host and path rules

[Hosts](#) ^

Paths

Backend

All unmatched (default)

All unmatched (default)

static-site-backend

Backend

Backend buckets

1. static-site-backend

Cloud CDN: disabled

Bucket

static-site-cdn-test



CHECKS COMPLETE 7 of 7 Locations	ERRORS FROM 0 Locations	AVG: 1 st VISIT 619.4 ms	AVG: 2 nd VISIT 135.0 ms		
AGENT / LOCATION	↕	FIRST VISIT	↕	REPEAT VISIT	↕
London		607.0 ms		117.0 ms	
San Francisco		413.0 ms		119.0 ms	
Brisbane		619.0 ms		144.0 ms	
Tel-Aviv		872.0 ms		152.0 ms	
Buenos Aires		174.0 ms		128.0 ms	
Johannesburg		944.0 ms		122.0 ms	
Paris		707.0 ms		163.0 ms	

← Add origin to Cloud CDN

Choose a load balancer as origin. Responses from the origin will be cached by Cloud CDN.

Origin ?

Select origin

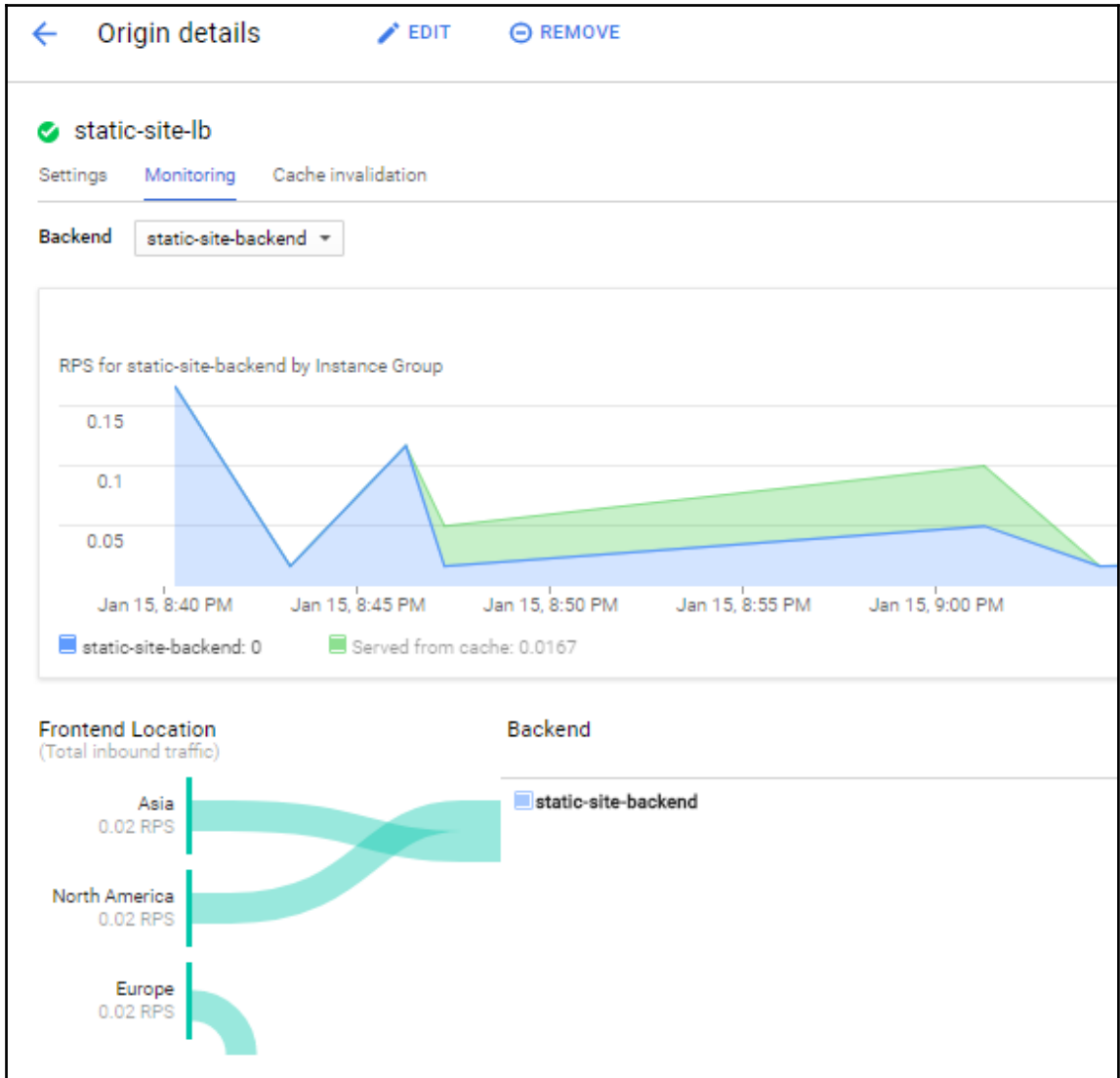
Filter ×

Create a load balancer...

Load balancer

static-site-lb

AGENT / LOCATION	↕	FIRST VISIT	↕	REPEAT VISIT	↕
London		221.0 ms		120.0 ms	
San Francisco		239.0 ms		119.0 ms	
Brisbane		234.0 ms		147.0 ms	
Tel-Aviv		719.0 ms		245.0 ms	
Buenos Aires		308.0 ms		133.0 ms	
Johannesburg		422.0 ms		118.0 ms	
Paris		646.0 ms		140.0 ms	



```

index.html x
1 <html>
2 <body>
3   <h1>Index file to test CDN :: Updated </h1>
4 </body>
5 </html>

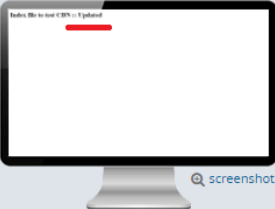
```

Resolve conflict

index.html already exists in static-site-cdn-test. How would you like to resolve this conflict?

Replace existing object
 Skip uploading object
 Repeat for all remaining conflicts

[CANCEL](#) [OK](#)



Brisbane
http://35.186.217.96/index.html

First Visit Repeat Visit

CHECKS COMPLETE
7 of 7 Locations

 ERRORS FROM
0 Locations

 AVG: 1st VISIT
552.7 ms

 AVG: 2nd VISIT
139.6 ms

AGENT / LOCATION	FIRST VISIT	REPEAT VISIT
London	381.0 ms	148.0 ms
San Francisco	167.0 ms	136.0 ms
Brisbane	939.0 ms	142.0 ms
Tel-Aviv	622.0 ms	160.0 ms
Buenos Aires	176.0 ms	128.0 ms
Johannesburg	941.0 ms	123.0 ms
Paris	643.0 ms	140.0 ms

AGENT / LOCATION	FIRST VISIT	REPEAT VISIT
London	381.0 ms	148.0 ms
San Francisco	167.0 ms	136.0 ms
Brisbane	939.0 ms	142.0 ms
Tel-Aviv	622.0 ms	160.0 ms
Buenos Aires	176.0 ms	128.0 ms
Johannesburg	941.0 ms	123.0 ms
Paris	643.0 ms	140.0 ms

static-site-lb

Settings Monitoring **Cache invalidation**

Path pattern to invalidate ?

Cached objects matching the path pattern will be invalidated in all Cloud CDN caches

Invalidate

Chapter 4: Security

```
Cloud Shell x +
~/gpccookbook/Chapter03/lets-be-bad-guys$ ls
app.yaml badguys LICENSE.txt manage.py README.md requirements.txt solutions.md
~/gpccookbook/Chapter03/lets-be-bad-guys$ cat app.yaml
# [START runtime]
runtime: python
env: flex
entrypoint: gunicorn -b :$PORT badguys.wsgi

runtime_config:
  python_version: 3.4
# [END runtime]
~/gpccookbook/Chapter03/lets-be-bad-guys$
```

```
Performing system checks...

System check identified no issues (0 silenced).
January 20, 2018 - 14:46:01
Django version 1.9.6, using settings 'badguys.settings'
Starting development server at http://127.0.0.1:8000/
Quit the server with CONTROL-C.
```

<https://8000-dot-2960840-dot-devshell.appspot.com/?authuser=0>

Shiny, Let's Be Bad Guys!

Exploiting and Mitigating the Top 10 Web App Vulnerabilities

Exercises

A1: Injection

Welcome to the Jungle

Security scans

[NEW SCAN](#)[RUN](#)[EDIT](#)[DELETE](#)**Scan date**

Jan 20, 2018
10:58 PM

URLs tested

127

Duration

25 min 15 sec

Vulnerabilities found

9

[Results](#)[URLs tested](#)[Details](#)

▶ **Cross-site scripting (6)**

▼ **Clear Text Password (1)**

Your application appears to be transmitting a password field in clear text.

To protect sensitive information passing between client and server:

- use TLS/SSL certificates
- password fields should only be present on pages that use HTTPS
- form action attributes should always point to an HTTPS URL

[Learn more](#)

- ▼ <http://gcp-cookbook.appspot.com/direct-object-references/users/1>


Reproduction URL

[http://gcp-cookbook.appspot.com/direct-object-references/users/1#javascript:alert\(\)](http://gcp-cookbook.appspot.com/direct-object-references/users/1#javascript:alert())

Unescaped field names

name
email
password

▶ **Outdated Library (2)**



Identity-Aware Proxy

Identity-Aware Proxy (IAP) lets you manage who has access to services hosted on App Engine and the Cloud HTTPS Load Balancer. [Learn more](#)

To get started with IAP, add an [App Engine app](#) or configure [Cloud Load Balancer for IAP](#).

i IAP for App Engine flexible environment is in beta.


⚠ Before you can use IAP, you need to configure your OAuth consent screen. Configure consent screen

Resource ^	IAP ?	Published ?	Configuration ?	⋮
App Engine app	<input type="checkbox"/>	https://gcp-cookbook.appspot.com	✔ OK	⋮

Product name shown to users ?

Homepage URL (Optional)

Product logo URL (Optional) ?



This is how your logo will look to end users

Max size: 120x120 px

Privacy policy URL

Optional until you deploy your app

Terms of service URL (Optional)

Turn on IAP

This will only allow access to your App Engine app by members listed in the Access panel

Enter the domain names used to access this resource: ?

gcp-cookbook.appspot.com



gcp-cookbook.appspot-preview.com



www.example.com

CANCEL TURN ON

Resource ^	IAP ?	Published ?	Configuration ?	
App Engine app	<input checked="" type="checkbox"/>	https://gcp-cookbook.appspot.com	<input checked="" type="checkbox"/> OK	⋮




You don't have access

Troubleshooting Info

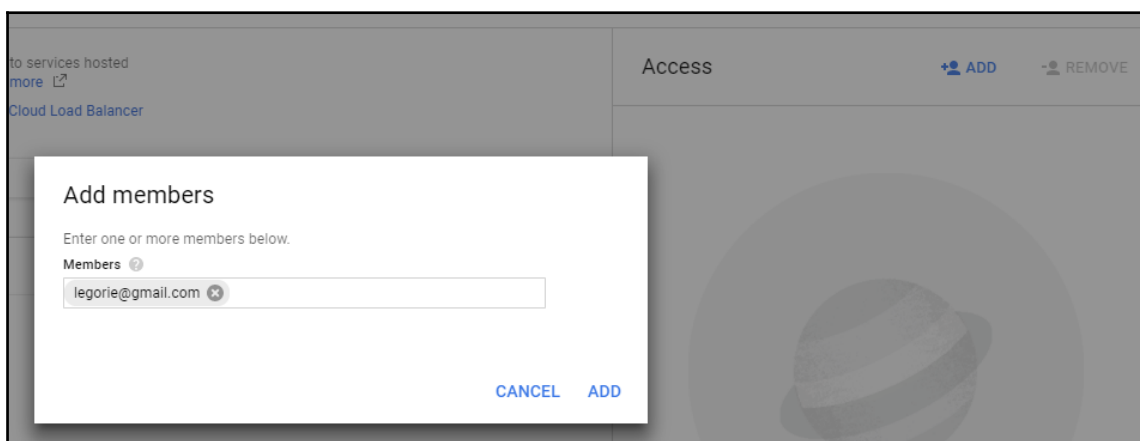
User: legorie@gmail.com

URL: <https://gcp-cookbook.appspot.com/>

If you should have access, please contact

 and provide the troubleshooting info above.



If you're signed in with multiple Google accounts, [try a different account](#).



The screenshot shows the Google Cloud Platform console interface. In the background, the 'Access' tab for a 'Cloud Load Balancer' is visible, with '+ ADD' and '- REMOVE' buttons. Overlaid on this is a white 'Add members' dialog box. The dialog box contains the text 'Enter one or more members below.' and a 'Members' section with a search input field. The email 'legorie@gmail.com' is entered in the field and is accompanied by a small 'x' icon to remove it. At the bottom of the dialog box, there are 'CANCEL' and 'ADD' buttons.

Access + ADD - REMOVE

Type Members ^ Inherited

 legorie@gmail.com 

https://gcp-cookbook.appspot.com

Shiny, Let's Be Bad Guys!

Exploiting and Mitigating the Top 10 Web App Vulnerabilities

Exercises

[A1: Injection](#)

Welcome to the Jungle

Encryption keys REFRESH + CREATE KEY RING

Key rings for "[REDACTED]" project

Cloud Key Management Service lets you create, use, rotate, and manage cryptographic keys for data encryption. To encrypt or decrypt data with a key, use the Cloud KMS API. [Learn more](#)

<input type="checkbox"/> Name ^	Location	Keys
<input type="checkbox"/> fin-keyring	global	fin-encrypt-key

✕ Storage Reviewer

ID: `projects/your-project-id/roles/compute.storageReviewer`

Role launch stage : **General Availability**

Description

Role for Storage Reviewer

24 combined permissions

- `compute.diskTypes.get`
- `compute.diskTypes.list`
- `compute.disks.get`
- `compute.disks.list`
- `compute.disks.useReadOnly`
- `compute.globalOperations.get`
- `compute.globalOperations.list`
- `compute.images.get`
- `compute.images.getFromFamily`
- `compute.images.list`
- `compute.images.useReadOnly`
- `compute.projects.get`
- `compute.regionOperations.get`
- `compute.regionOperations.list`
- `compute.regions.get`
- `compute.regions.list`
- `compute.snapshots.get`
- `compute.snapshots.list`
- `compute.snapshots.useReadOnly`
- `compute.zoneOperations.get`
- `compute.zoneOperations.list`
- `compute.zones.get`
- `compute.zones.list`
- `resourcemanager.projects.get`

← Edit Role

Custom roles let you group permissions and assign them to members of your project or organization. You can manually select permissions or import permissions from another role. [Learn more](#)

ID: projects/your-project-id/roles/compute.storageReviewer

Name

Description

Role launch stage

[+ Add Permissions](#)

24 assigned permissions

All services ▾

All types ▾

Name

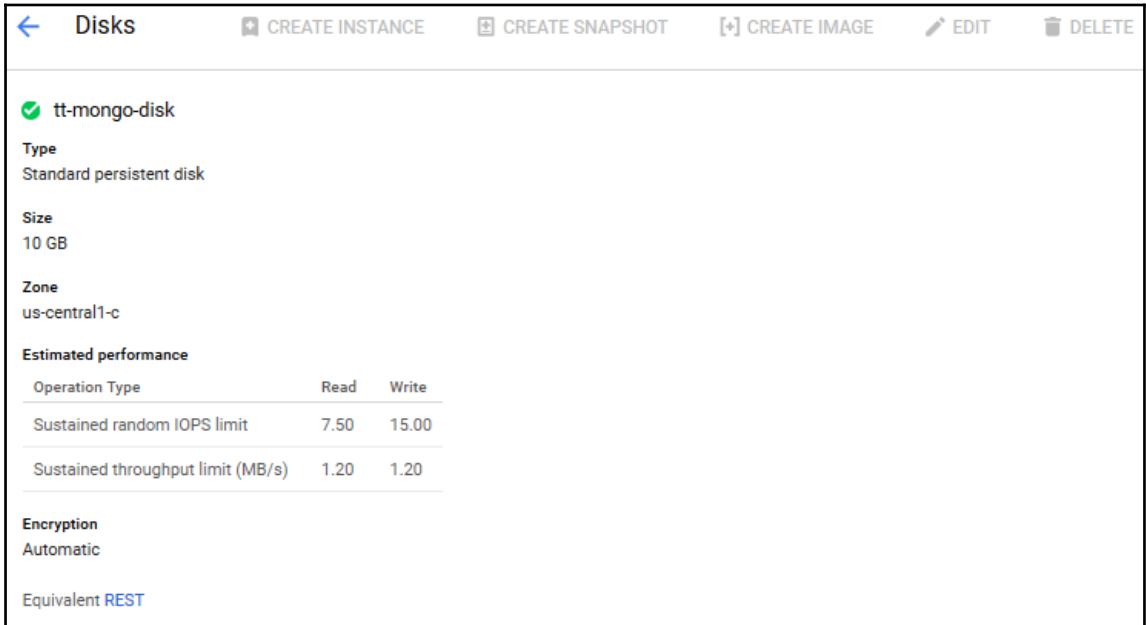
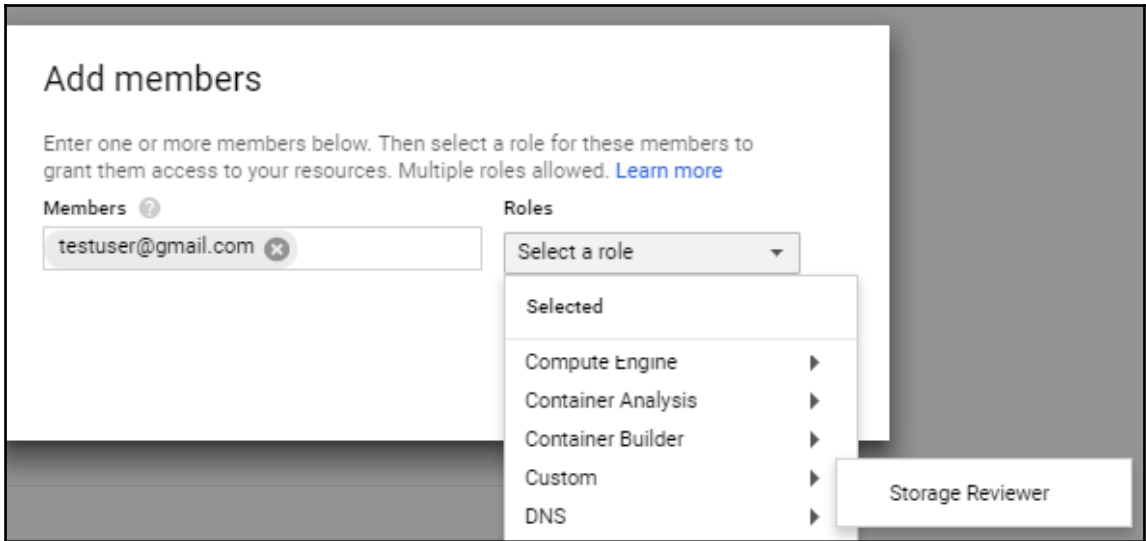
compute.diskTypes.get

compute.diskTypes.list

compute.disks.get

compute.disks.list

compute.disks.useReadOnly



Disks CREATE DISK You don't have permission to create a disk

Filter Resources Columns

<input type="checkbox"/> Name ^	Type	Size	Zone	In use by
<input checked="" type="checkbox"/> tt-mongo-disk	Standard persistent disk	10 GB	us-central1-c	

<input type="checkbox"/> Instance ID ?	Type	IP address	Instance connection name
<input checked="" type="checkbox"/> mysql-test	MySQL 2nd Gen 5.7	35.192.104.137	upbeat-aura-163616:us-central1:mysql-test

<input type="checkbox"/> Service account name ^	Service account ID
<input type="checkbox"/> App Engine default service account	upbeat-aura-163616@appspot.gserviceaccount.com
<input type="checkbox"/> Compute Engine default service account	518993786967-compute@developer.gserviceaccount.com
<input type="checkbox"/> Service a/c with sql access	my-sa-with-sql@upbeat-aura-163616.iam.gserviceaccount.com

← Create an instance

Name ⓘ
instance-sql-1

Zone ⓘ
us-central1-c

Machine type
Customize to select cores, memory and GPUs.

micro (1 shared... 0.6 GB memory [Customize](#)

[Upgrade your account](#) to create instances with up to 96 cores

Co Filter ×

Bo

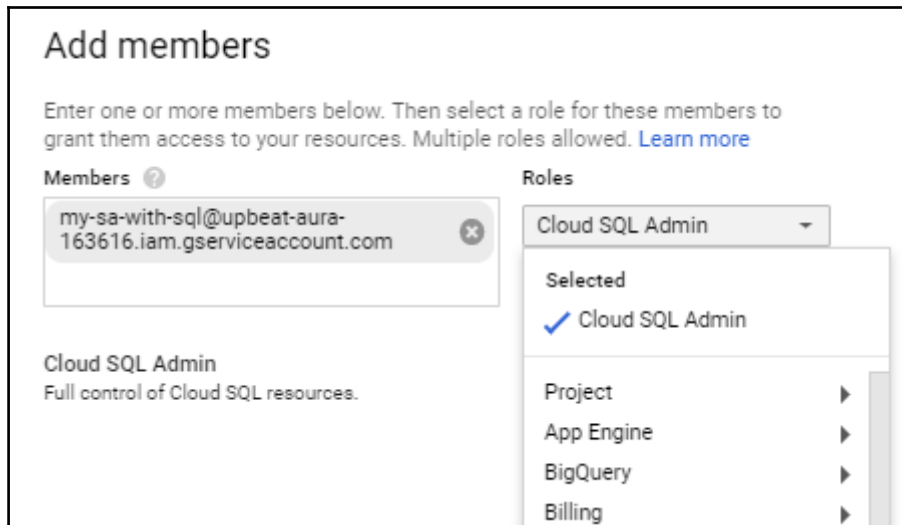
- App Engine default service account
upbeat-aura-163616@appspot.gserviceaccount.com
- Service a/c with sql access
my-sa-with-sql@upbeat-aura-163616.iam.gserviceaccount.com
- Compute Engine default service account
518993786967-compute@developer.gserviceaccount.com

Ide No service account

Service a/c with sql access

Access scopes ⓘ
Use IAM roles with service accounts to control VM access [Learn more](#)

IAM [+ ADD](#) [- REMOVE](#)



```
instance-sql-1:~$ gcloud sql connect mysql-test --user=root
ERROR: (gcloud.sql.connect) HTTPError 403: The client is not authorized to make this request.
instance-sql-1:~$ gcloud sql connect mysql-test --user=root
Whitelisting your IP for incoming connection for 5 minutes...done.
Connecting to database with SQL user [root].Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MySQL connection id is 434
Server version: 5.7.14-google-log (Google)

Copyright (c) 2000, 2017, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MySQL [(none)]>
```

```

1 resource.type="gce_instance"
2 protoPayload.methodName="beta.compute.instances.insert"
3 timestamp >= "2018-03-24T12:00:00.083434706Z"

```

Submit Filter 🕒 Last hour ▾ Jump to now

Showing logs from the last hour ending at 1:04 PM (CET)

↓ No older entries found match

- ▶ ⓘ 2018-03-24 13:01:45.126 CET Compute Engine insert us-east1-b:instance-1
- ▶ ⓘ 2018-03-24 13:01:51.808 CET Compute Engine insert us-east1-b:instance-1

↑

← → 🔄 🔒 Sécurisé | <https://developers.google.com/apis-explorer/#search/logging/>

Google Loading... 🔍

APIs Explorer

- ☰ Services
 - ▼ Services
 - 🔗 Stackdriver Logging API v2 Default Writes log entries and manages your Stackdriver Logging configuration.
 - 🔗 Stackdriver Logging API v2beta1 Writes log entries and manages your Stackdriver Logging configuration.
 - 🔗 Google Service Control API v1 Default Google Service Control provides control plane functionality to managed s
- ☰ All Versions
- 🕒 Request History

logging.entries.list Lists log entries. Use this method to retrieve log entries from Stackdriver Logging. For ways to export log entries, see Exporting Logs.

fields

Selector specifying which fields to include in a partial response.
[Use fields editor](#)

Request body

```

{
  "resourceNames": [
    "projects/gcp-cookbook"
  ],
  "filter": "logName=projects/gcp-cookbook/logs/cloudaudit.googleapis.com%2Factivity AND resource.type=gce_instance AND protoPayload.methodName=beta.compute.instances.insert AND operation.first=True AND timestamp >= \"2018-01-24T02:13:02.356425Z\""
}

```

-- add a property --

[Execute without OAuth](#)logging.entries.list executed moments ago time to execute: 494 ms

Request

POST https://logging.googleapis.com/v2/entries:list?key={YOUR_API_KEY}

```

- {
-   "resourceNames": [
-     "projects/gcp-cookbook"
-   ],
-   "filter": "logName=projects/gcp-cookbook/logs/cloudaudit.googleapis.com%2Factivity AND \nresource.type=gce_instance AND \nprotoPayload.methodName=beta.compute.instances.insert AND \noperation.first=True AND \ntimestamp >= \"2018-03-24T02:13:02.356425Z\""
- }

```

Response

200

- Show headers -

```

- {
-   "entries": [
-     {
-       "protoPayload": {
-         "@type": "type.googleapis.com/google.cloud.audit.AuditLog",
-         "authenticationInfo": {

```

Chapter 5: Machine Learning and Big Data

Create Dataset ✕

Dataset ID ?

Data location ?

Data expiration Never In days.

Create Table

Source Data Create from source Create empty table

Destination Table

Table name . ?

Table type ?

Schema

Name	Type	Mode
<input type="text" value="screen_name"/>	<input type="button" value="STRING"/>	<input type="button" value="NULLABLE"/> ✕
<input type="text" value="tweet_txt"/>	<input type="button" value="STRING"/>	<input type="button" value="NULLABLE"/> ✕

[Edit as Text](#)

Options

Partitioning Type

Partitioning Field ?

Require partition filter ?

Destination Encryption ?

```

$ python twitter2BQ.py gcp-cookbook
advBookmark [BI] アップルのiCloud、実はGoogle Cloudを使っていた セキュリティなどの問題は? https://t.co/7iww8kyW58
Loaded 1 row into table
-----
co_jit 3件のコメント https://t.co/vBbtWLR68i "アップルのiCloud、実はGoogle Cloudを使っていた セキュリティなどの問題は?" https://t.co/pkimy9cbwM
Loaded 1 row into table
-----

```

New Query Query Editor UDF Editor X

1 SELECT * FROM [<Project ID>:TwitterData.theTweets] LIMIT 1000 SQL

Ctrl + Enter: run query, Tab or Ctrl + Space: autocomplete.

RUN QUERY
Save Query
Save View
Format Query
Show Options

Download as CSV Download as JSON Save as Table Save to Google Sheets

Row	screen_name	tweet_txt
1	co_jit	3件のコメント https://t.co/vBbtWLR68i "アップルのiCloud、実はGoogle Cloudを使っていた セキュリティなどの問題は?" https://t.co/pkimy9cbwM
2	ZifuyKat	RT @FoxNews: Trump, Netanyahu to meet amid growing uncertainty on Mideast peace deal https://t.co/BSdUZeUxZi
3	advBookmark	[BI] アップルのiCloud、実はGoogle Cloudを使っていた セキュリティなどの問題は? https://t.co/7iww8kyW58

```

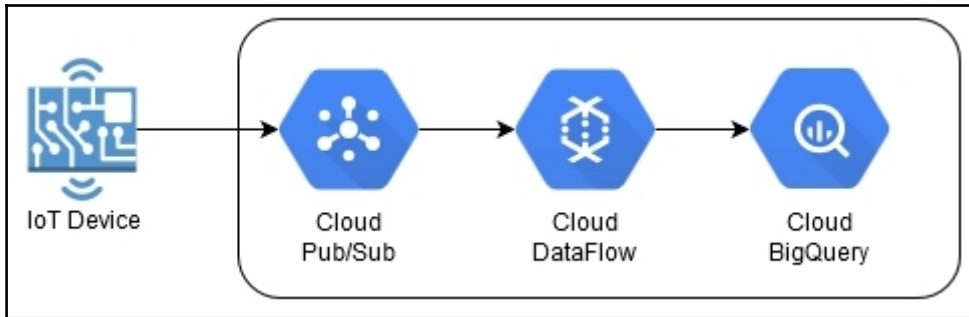
Tweet Text: サッカーW杯代表選考、2段階で絞り込む案も ハリル監督 - 日本経済新聞 https://t.co/ZHbuum68A7 #NEWS
Language: ja
Translation: Football World Cup national team selection, also a plan to narrow down in two stages Ha Ril Director - Nihon Keizai Shimbun https://t.co/ZHbuum68A7 # NEWS
-----
Tweet Text: RT @DLoesch: From a guy that got his start being a horndog second banana on a show that ended every episode with a chick on a trampoline. H..
Language: en
-----
Tweet Text: Surprised they didn't change dates ten minutes after the news hit. https://t.co/MDGRoWN5p4
Language: en
-----

```

```

Tweet Text: #news #opiatecrisis #feellourpain https://t.co/eEAc54dR81
Language: en
Translation: #news #opiatecrisis #feellourpain https://t.co/eEAc54dR81
-----
Tweet Text: RT @MirrorFootball: #MUFC: DE DONUT, TONI BARCELONA, Lindelof, Smalling, Young, McTominay, OTTO, Pogba, Alexis, Lukaku, Lingard https://t.co/...
Language: en
Translation: RT @MirrorFootball: #MUFC: DE DONUT, TONI BARCELONE, Lindelof, Smalling, Jeune, McTominay, OTTO, Pogba, Alexis, Lukaku, Lingard https://t.co/...
-----
Tweet Text: High school was a learning experience for me! Nigga was all on yahoo news and all the local news stations shit was mad epic.
Language: en
Translation: Le lycée était une expérience d'apprentissage pour moi! Nigga était tout sur les nouvelles de Yahoo et toutes les merdes de stations de nouvelles t épiques folles.
-----
Tweet Text: RT @logatel3asr: #11/9/2016 أمطار في مزارعات بوم https://t.co/7FWc4DMzn7 https://t.co/TqH7LrO8vC
Language: ar
Translation: RT @ logatel3asr: # Buts # Correspondances le 11/9/2016 https://t.co/7FWc4DMzn7 https://t.co/TqH7LrO8vC
-----
Tweet Text: RT @CFMEU: "The combined strength of the CFMEU, MUA and TCFUA in our new union will write a new chapter in Australia's union movement. Ordi...
Language: en
Translation: RT @CFMEU: "La force combinée du CFMEU, MUA et TCFUA dans notre nouveau syndicat va écrire un nouveau chapitre dans le mouvement syndical aus
-----
Tweet Text: Google Unveils 72-Qubit Quantum Computer with Low Error Rates https://t.co/z3upUu7YqS https://t.co/Mp3m8i61r7
Language: en
Translation: Google dévoile l'ordinateur Quantum 72-Qubit avec des taux d'erreur faibles https://t.co/z3upUu7YqS https://t.co/Mp3m8i61r7
-----

```



← Topic details
[PUBLISH MESSAGE](#)
[CREATE SUBSCRIPTION](#)
[DELETE](#)

projects/gcp-cookbook/topics/tempSensorTopic
Subscriptions: 1

<input type="checkbox"/> Name	Delivery type	Acknowledgement deadline	Project
<input type="checkbox"/> projects/gcp-cookbook/subscriptions/readTempSubscrip	Pull	10	gcp-cookbook

Dataflow | Jobs + CREATE JOB FROM TEMPLATE

Dataflow | ← Create job from template

Job name
Specify a job name for the Dataflow job. [?](#)

Cloud Dataflow Regional Endpoint
The regional endpoint where metadata will be stored for the job. [Learn more](#) [↗](#)

Cloud Dataflow template
A pipeline that reads from a Pub/Sub topic and writes messages text files stored in GCS. Note that this pipeline assumes no newlines in the body of the Pub/Sub message and thus each message becomes a single line in the output file.

Parameters

Input Cloud Pub/Sub topic

Cloud Pub/Sub topic to read the input from. The topic name should be in the format of `projects/<project-id>/topics/<topic-name>`.

Output Cloud Storage directory

Path and filename prefix for writing output files (ex: `gs://bucket-name/path/`). This value must end in a slash.

Output file prefix

The prefix to place on each windowed file (ex: `output-`).

Output file suffix (Optional)

[Optional] The suffix to place on each windowed file. Typically a file extension (`.txt`, `.csv`, etc.).

The shard template (Optional)

[Optional] The shard template defines the unique/dynamic portion of each windowed file. Recommended to use the default (`W-P-SS-of-NN`). At runtime, `W` is replaced with the window date range and `P` is replaced with the pane info. Repeating sequences of the letters `'S'` or `'N'` (example: `SSS-NNN`) are replaced with the shard number and number of shards respectively. The pipeline assumes a single file output and thus will produce the text of `'00-of-01'` by default.

Temporary Location

Path and filename prefix for writing temporary files. ex: `gs://MyBucket/tmp`

process-temperature
LOGS

```

graph TD
    A[Read PubSub Events Running] --> B[5m Window Running]
    B --> C[Write File(s) Running]
  
```

Job

Job summary

Job name	process-temperature
Job ID	2018-02-18_13_19_31-5867004148214605825
Region	us-central1
Job status	● Running
Stop job	
SDK version	Apache Beam SDK for Java 2.2.0
Job type	Streaming
Start time	Feb 18, 2018, 10:19:31 PM
Elapsed time	23 sec

Autoscaling

```

graph TD
    A[Read PubSub Events Running] --> B[5m Window Running]
    B --> C[Write File(s) Running]
  
```

Step summary

Step name	Read PubSub Events
System lag	7 sec
Data watermark	2018-02-18 (22:28:27)

Output collections

Read PubSub Events/MapElements/Map.out0

Elements added	5
Estimated size	200 B

```

graph TD
    A[Read PubSub Events  
Running] --> B[5m Window  
Running]
    B --> C[Write File(s)  
Running]
  
```

Step summary

Step name	5m Window
System lag ?	3 sec
Data watermark ?	2018-02-18 (22:28:46)

Input collections

Read PubSub Events/MapElements/Map.out0

Elements added ?	5
Estimated size ?	200 B

Output collections

5m Window/Window.Assign.out0

Elements added ?	5
Estimated size ?	255 B

```

graph TD
    A[Read PubSub Events  
Running] --> B[5m Window  
Running]
    B --> C[Write File(s)  
Running]
  
```

Step summary


Step name	Write File(s)
System lag ?	3 sec
Data watermark ?	2018-02-18 (22:29:17)

Input collections

5m Window/Window.Assign.out0

Elements added ?	5
Estimated size ?	255 B

Buckets / tempsensor / data

<input type="checkbox"/> Name	Size
<input type="checkbox"/>  df2018-02-18T21:25:00.000Z-2018-02-18T21:30:00.000Z-pane-0-last-00-of-01.txt	135 B

Contents of the file:

```
22-Jan-2018 10:12:43 70.0F
22-Jan-2018 10:12:55 70.0F
22-Jan-2018 10:13:04 70.6F
22-Jan-2018 10:16:20 71.0F
22-Jan-2018 10:14:36 70.1F
```

IoT Core


Device registries

A device registry allows you to group devices and set properties that they all share, such as connection protocol, data storage location, and Cloud Pub/Sub topics. To start connecting devices to Cloud IoT, first create a device registry to place them in. [Learn more](#)

[Create device registry](#)

Create a topic

A topic forwards messages from publishers to subscribers.

Name 

[CANCEL](#) [CREATE](#)



Set shared properties for devices in this registry.

Registry ID [?]

Cloud region [?]

Protocol [?]

 MQTT HTTP


Cloud Pub/Sub topics

Default telemetry topic [?]

⌵ [Add more telemetry topics](#)

Device state topic (Optional) [?]

⌵ [Add CA certificate](#)



← Create a subscription

A subscription directs messages on a topic to subscribers. Messages can be pushed to subscribers immediately, or subscribers can pull messages as needed.

Topic
projects/gcp-cookbook/topics/temperature

Subscription name ?

Delivery Type ?

Pull
 Push into an endpoint url ?

∨ More options



Add a device to registry `temperature-reg`.

Device ID

temp-mocked-dev-mc

Device communication

Allow

Block

Authentication (Optional)

Input method

Enter manually

Upload

Public key format

RS256

ES256

RS256_X509

ES256_X509

Public key value

tempIoT_public_cert.pem

Browse

Chapter 6: Management Tools

The screenshot displays the Google Cloud Platform Logs Explorer interface. At the top, there are navigation icons and buttons for 'CREATE METRIC', 'CREATE EXPORT', a refresh icon, and a play icon. Below this is a search bar labeled 'Filter by label or text search'. The left-hand navigation pane shows a list of resource types, with 'GCE VM Instance' selected and highlighted. The main content area shows a log viewer for 'GCE VM Instance' with a 'No entries' message. The interface includes various filter options and a list of resource types.

Filter by label or text search

GCE VM Instance

Recently selected resources

- GCE VM Instance
- GCE VM Instance, 5958737414213893529
- Cloud Function, imageresize, us-central1
- Cloud Function, imageresize
- Cloud SQL Database

BigQuery

Cloud IoT Device

Cloud IoT Device Registry

Cloud SQL Database

Dataflow Step

GCE Disk

GCE Instance Group Manager

GCE Instance Template

✓ GCE VM Instance

GCS Bucket

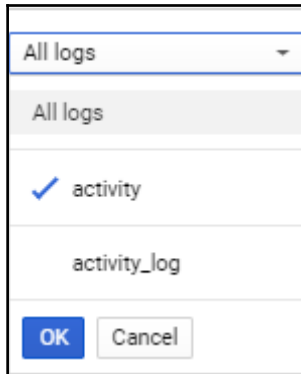
Service Account

All logs

Any log level

(CET)

No entries



```

▶ ⓘ 2018-03-11 11:43:10.891 CET Compute Engine insert us-west1-a:instance-1
▶ ⓘ 2018-03-11 11:43:18.765 CET Compute Engine insert us-west1-a:instance-1

```

GCE VM Instance activity Any log level Last hour Jump to now

Showing logs from the last hour ending at 11:45 AM (CET)

Load older logs

```

▶ ⓘ 2018-03-11 11:43:10.891 CET Compute Engine insert us-west1-a:instance-1 @google.com {"@type":"type.googleapis.com/google.
  {
    insertId: "-27qs16d3xhk"
    logName: "projects/gcp-xxxxx/logs/cloudaudit.googleapis.com%2Factivity"
    operation: {...}
    protoPayload: {
      @type: "type.googleapis.com/google.cloud.audit.AuditLog"
      authenticationInfo: {...}
      authorizationInfo: [6]
      methodName: "beta.compute.instances.insert"
      request: {...}
      requestMetadata: {
        resourceName: "zones/us-west1-a/instances/instance-1"
      }
      response: {...}
      serviceName: "compute.googleapis.com"
    }
    receiveTimestamp: "2018-03-11T10:43:12.268507207Z"
    resource: {...}
    severity: "NOTICE"
    timestamp: "2018-03-11T10:43:10.891Z"
  }
▶ ⓘ 2018-03-11 11:43:18.765 CET Compute Engine insert us-west1-a:instance-1 @google.com {"@type":"type.googleapis.com/google.

```

CREATE METRIC CREATE EXPORT

```
1 resource.type="gce_instance"
2 logName="projects/<Project ID>/logs/cloudaudit.googleapis.com%2Factivity"
3 protoPayload.methodName="beta.compute.instances.insert"
```

Submit Filter Last hour ▾ Jump to now

CREATE METRIC CREATE EXPORT

```
1 resource.type="gce_instance"
2 logName="projects/<Project ID>/logs/cloudaudit.googleapis.com%2Factivity"
3 protoPayload.methodName="beta.compute.instances.insert"
4 NOT resource.labels.zone=("us-west1-c" OR "us-west1-a" OR "us-west1-b")
```

Submit Filter Last hour ▾ Jump to now

Showing logs from the last hour ending at 12:27 PM (CET)

↓ No older entries

▶		2018-03-11 12:26:31.755 CET	Compute Engine	insert	us-central1-c:instance-1
▶		2018-03-11 12:26:48.805 CET	Compute Engine	insert	us-central1-c:instance-1

↑

✕ Metric Editor

Name

Description

Labels ?

+ Add item

Units ? (Optional)

Type ?

Create Metric
Cancel

User-defined Metrics
 User defined logs-based metrics that count the number of log entries that match a given filter.

Name ^	Type	Description	Filter	
<input type="checkbox"/> user/VM_outside_US-West	Counter	VM created outside the specified region us-west1	resource.type="gce_instance" logName="projects/your-project/logs/cloudaudit.googleapis.com%2Factivity" protoPayload.methodName="beta.compute.instances.insert" NOT resource.labels.zone="us-west1-c" OR "us-west1-e" OR "us-west1-b"	Edit metric Delete metric View in Metric Explorer ↗ Create alert from metric ↗

Welcome to Stackdriver Monitoring!

Monitor Uptime

Check the availability of user-facing web pages, instances, and load balancers

CREATE CHECK

Set Alerting Policies

Get notified if anything goes wrong in your application or services

CREATE POLICY

Create a Dashboard

Improve your application by customizing a display with system-wide metrics

CREATE DASHBOARD

Create new alerting policy

1 Conditions

Conditions describe when apps and services are considered unhealthy. When conditions are met, they trigger alerting policy violations. [Learn more](#)

+ Add Condition

2 Notifications (optional)

When alerting policy violations occur, you will be notified via these channels. [Learn more](#)

+ Add Notification

3 Documentation (optional)

When email notifications are sent, they'll include any text entered here. This can convey useful information about the problem and ways to approach fixing it.

+ Add Documentation

Select condition type

Conditions help you measure the health of your cloud services and platforms. Create a condition to determine when your alert should trigger. [Learn more](#)

Basic Types

Metric Threshold

Select



A threshold condition can be configured to alert you when any metric crosses a set line for a specific period of time (ex. alert me when the latency on my load balancer is greater than 1000 ms for 15 minutes). You can use this condition type to monitor many different metrics and fine tune exactly when you'd like to be notified.

Add Metric Threshold Condition

A threshold condition can be configured to alert you when any metric crosses a set line for a specific period of time.

[Change](#)

Target

RESOURCE TYPE

Log Metrics

Configuration

IF METRIC

user/VM_outside_US-West

CONDITION

above

THRESHOLD

1 count

FOR

1 minute

RESOURCE

Any



TIME 1h 6h 1d 1w 1m 6w

2 Notifications (optional)

When alerting policy violations occur, you will be notified via these channels. [Learn more](#)

Email

jo@example.com



Add Another Notification

4 Name this policy

A policy's name is used in identifying which policies were triggered, as well as managing configurations of different policies.

Alert on VM creation outside us-west

Save Policy

Cancel

GCP-Cookbook-Monitoring is not in a Stackdriver account

Create a new Stackdriver account

Add GCP-Cookbook-Monitoring to an existing Stackdriver account

Continue

Cancel

Create your free Stackdriver account

Start your 30 day free trial. No credit card required.

Select or create a new Google Cloud Platform project to store your Stackdriver account settings and user permissions. The selection cannot be changed, but you can create other Stackdriver accounts later. [Learn more](#)

Google Cloud Platform project



Add Google Cloud Platform projects to monitor optional

Add Google Cloud Platform projects to monitor as part of this Stackdriver account. You can edit this selection later in account settings. [Learn more](#)



Select all [None](#)

 GCP-Cookbook-Monitoring (gcp-cookbook-monitoring)

Get Reports by Email

Stackdriver can send you reports on the performance of your cloud applications by email. Reports include information on incidents and utilization.



Select the frequency of reports that you would like to receive. You can change this setting any time in your Account Settings.

- Daily reports, including weekly summaries
- Weekly reports
- No reports

Continue

Finished initial collection!

Launch monitoring

<input type="checkbox"/> Name ^	Zone	Recommendation	Internal IP	External IP	Connect
<input type="checkbox"/>  instance-1	us-east1-b		10.142.0.2	35.229.39.6 	SSH ▾ ⋮
<input type="checkbox"/>  instance-2	us-east1-b		10.142.0.3	35.229.81.172 	SSH ▾ ⋮

Testing 123..

This page is used to test the proper operation of the [Apache HTTP server](#) after it has been installed. If you can read this page it means that this site is working properly. This server is powered by [CentOS](#).

You don't have any uptime checks. [Learn more](#) about the uptime monitoring functionality.

Create an Uptime Check

New Uptime Check

Title

instance1-uptime-check

Check Type

HTTP

Resource Type

Instance

Applies To

Single

instance-1

Path

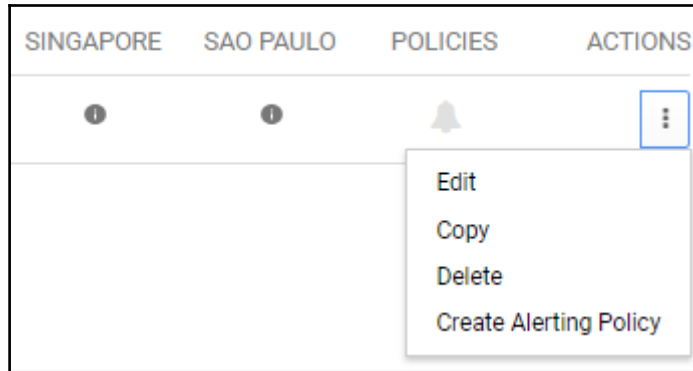
/index.html

Select protocol and enter the path component of the URL you want to check.

Check every

5 minutes

[Advanced Options](#)



Edit Uptime Check Health Condition

[Change](#)

Condition Name

HTTP check on instance instance-1

Target

RESOURCE TYPE

Instances

APPLIES TO

Single

instance-1

Configuration

IF UPTIME CHECK

instance1-uptime-check

IS DOWN FOR


5 minutes


Save Condition

Cancel

4 Name this policy

A policy's name is used in identifying which policies were triggered, as well as managing configurations of different policies.

Alerting / **Policies** Order By [Open Violations](#) 

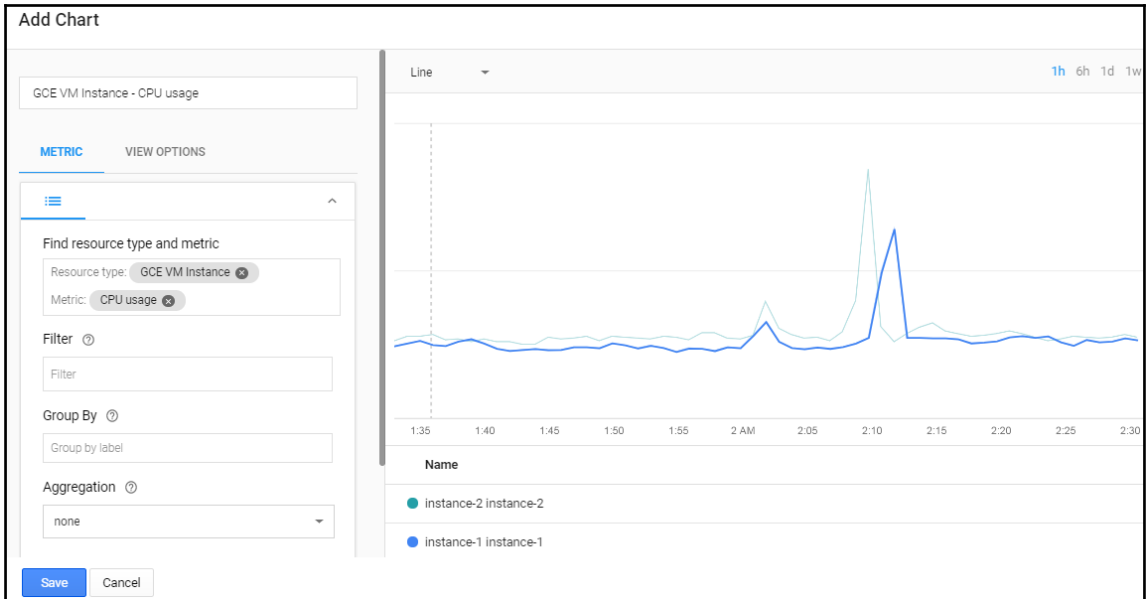
 Filter...

POLICIES WITH BASIC CONDITIONS

On

[Uptime Check Policy-Instance 1](#)

- Uptime Check Health on Instance instance-1 fails
modified a minute ago by [\[redacted\]@gmail.com](#)



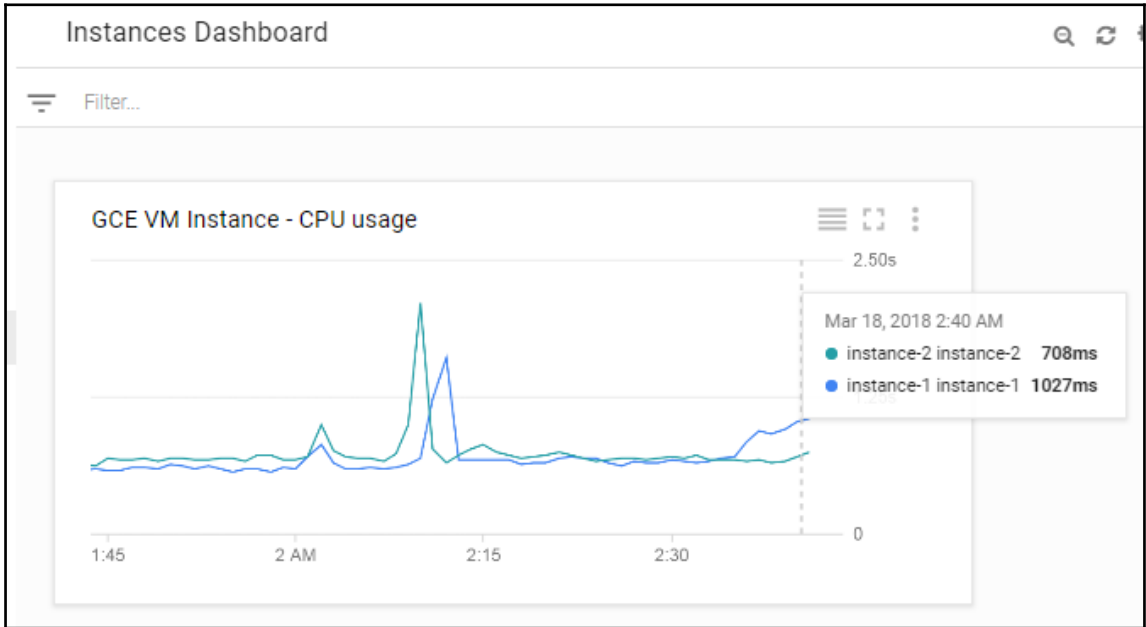
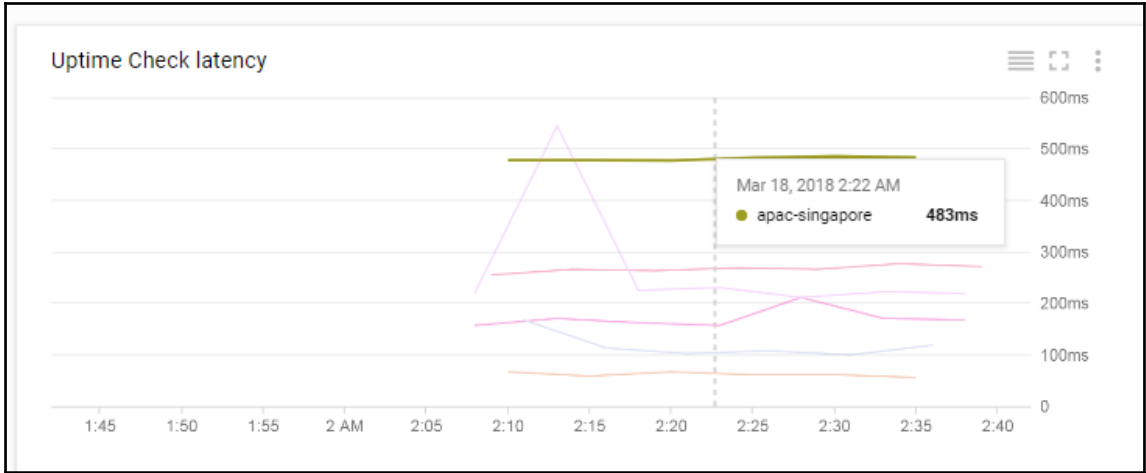
Alerting / Policies / **Uptime Check Policy-Instance 1**

Incidents ?

Create Alerting Policy

OPEN (0) ACKNOWLEDGED (1) RESOLVED (0)

● No open incidents



Deployments			
		+ DEPLOY CLOUD LAUNCHER SOLUTION	DELETE
Filter by label or name			
<input type="checkbox"/> Name ^	Created on	Last modified	Labels
<input type="checkbox"/> quickdeploy	5 minutes ago	5 minutes ago	

← quickdeploy
▶ DEPLOY
✕
🗑️

✔️ quickdeploy is in preview

- 👁 Overview - quickdeploy
- 👁 data-disk-1 disk
- 👁 data-disk-2 disk
- 👁 quickstart-deployment-vm vm instance

quickstart-deployment-vm

Resource properties

type	compute.v1.instance
disks	<ul style="list-style-type: none"> - autoDelete: true boot: true deviceName: boot initializeParams: <ul style="list-style-type: none"> sourceImage: https://www.googl type: PERSISTENT - autoDelete: true boot: false deviceName: data-disk-1 source: \$(ref.data-disk-1.selfLink) type: PERSISTENT - autoDelete: true boot: false deviceName: data-disk-2 source: \$(ref.data-disk-2.selfLink) type: PERSISTENT
machineType	https://www.googleapis.com/com
networkInterfaces	<ul style="list-style-type: none"> - accessConfigs: <ul style="list-style-type: none"> - name: External NAT type: ONE_TO_ONE_NAT network: https://www.googleapis.
zone	us-central1-f

← quickdeploy DELETE

✓ quickdeploy has been deployed

Overview - quickdeploy

- data-disk-1 disk
- data-disk-2 disk
- quickstart-deployment-vm vm instance

← VM instance details EDIT RESET CLONE STOP DELETE

Boot disk and local disks

Name	Size (GB)	Type	Mode
quickstart-deployment-vm	10	Standard persistent disk	Boot, read/write

Delete boot disk when instance is deleted

Additional disks

Name	Size (GB)	Type	Mode	When deleting instance
data-disk-1	10	Standard persistent disk	Read/write	Delete disk
data-disk-2	11	Standard persistent disk	Read/write	Delete disk

Deployments + DEPLOY CLOUD LAUNCHER SOLUTION DELETE

Filter by label or name



<input checked="" type="checkbox"/> Name ^	Created on	Last modified
<input checked="" type="checkbox"/> ✓ quickdeploy	17 minutes ago	15 minutes ago
<input checked="" type="checkbox"/> ✓ vm2disk-deploy	4 minutes ago	4 minutes ago

Permissions for project "GCP Cookbook"

These permissions affect this project and all of its resources. [Learn more](#)

View By: MEMBERS ROLES

☰ Compute Engine default service account ✕ Filter table

<input type="checkbox"/>	Type	Member ↑	Name	Role	Inheritance	
<input type="checkbox"/>	📧	284284611269-compute@developer.gserviceaccount.com	Compute Engine default service account	Compute Admin		 

Edit permissions

Member
284284611269-
compute@developer.gserviceaccount.com

Project
GCP
Cookbook

Role
Compute Admin ▼

Full control of all Compute Engine resources.

🗑️

🗑️

🔍 Type to filter

- Dataproc
- Datastore
- Deployment Manager
- Dialogflow
- DNS
- Error Reporting**
- Firebase
- Firebase Crash Repo...
- Genomics

- Error Reporting Admin
- Error Reporting User
- Error Reporting Viewer
- Errors Writer

MANAGE ROLES

Name ↑	Role
Compute Engine default service account	Compute Admin Errors Writer

<input type="checkbox"/> Name ^	Zone	Recommendation	Internal IP	External IP	Connect
<input checked="" type="checkbox"/> flask-instance	us-east1-c		10.142.0.2	35.196.237.75	SSH ▾ ⋮

← → ↻ ⓘ 35.196.237.75:5000

Hello World!

← → ↻ ⓘ 35.196.237.75:5000/error

Internal Server Error

The server encountered an internal error and was unable to complete your request. Either the server is overloaded or there is an error in the application.

Stackdriver Error Reporting All versions ▾ Open, Acknowledged ▾ ▶ AUTO RELOAD

Filter errors 1 hour 6 hours 1 day 7

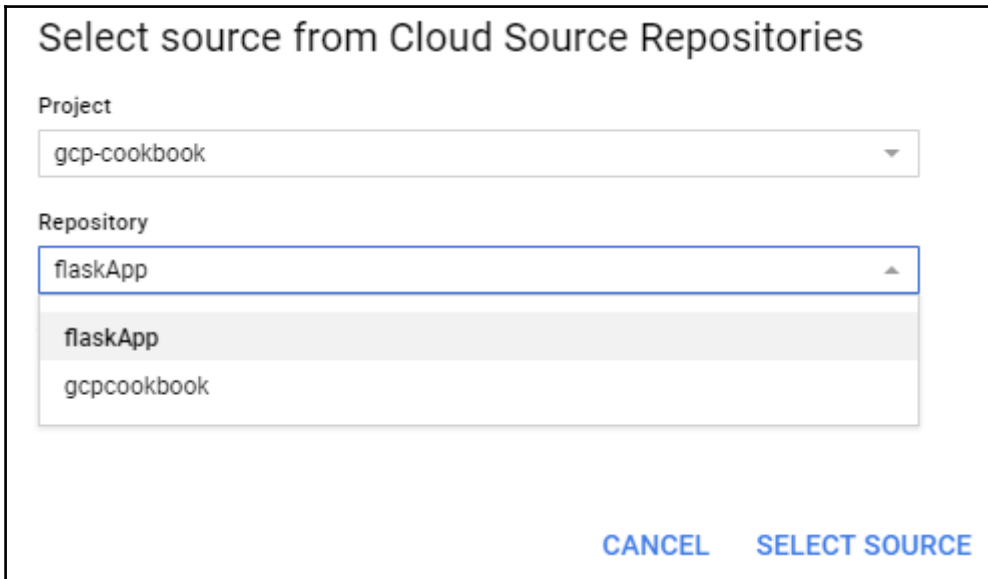
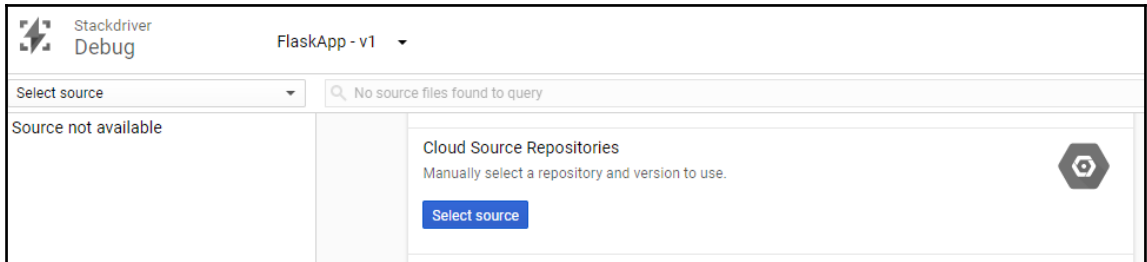
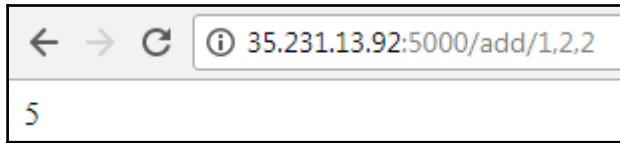
Errors in the last hour

Resolution Status	Occurrences ▾	Error	Seen in	First seen	Last seen
Open ▾	1	NEW NameError simulate_error (hello.py)	python	5 minutes ago	5 minutes ago
Open ▾	1	NEW An error has occurred. report_manual_error (hello.py)	python	5 minutes ago	5 minutes ago

← → ↻ ⓘ 104.196.157.49:5000


Hello World! - testing debugger

<input type="checkbox"/> Type	Member ↑	Name	Role	Inheritance
<input type="checkbox"/>	284284611269-compute@developer.gserviceaccount.com	Compute Engine default service account	Stackdriver Debugger Agent Compute Admin Errors Writer Source Repository Writer	




Snapshot Logpoint

Stackdriver Debugger lets you inspect the state of an application at any code location without stopping or slowing it down. The debugger makes it easier to view the application state without adding logging statements. Learn more about it [here](#).

 Stackdriver Debugger is not correctly configured for your project.

Please fix the following issues and try again:

Compute Engine service account 

[Fix](#)

Stackdriver Debug FlaskApp - v1

gcp-cookbook/flaskApp@master 🔍 Type a file name

cloud repository/
 helloDebug.py
 requirements.txt

```
1 # Sample code to demonstrate GCP Debugger
2 from flask import Flask
3 import re
4 app = Flask(__name__)
5
6 @app.route('/')
7 def hello_world():
8     return 'Hello World! - testing debugger'
9
10 @app.route('/add/<int_list>')
11 # Thanks to :
12 # https://stackoverflow.com/questions/35437180/capture-a-list-of-integers-with-a-flask-route
13 def index(int_list):
14     # Make sure it is a list that only contains integers.
15     if not re.match(r'^\d+(?:,\d+)*$', int_list):
16         return "Please input a list of integers, split with ','"
17     result = sum(int(i) for i in int_list.split(','))
18     return "{0}".format(result)
19
20 if __name__ == '__main__':
21     app.run(host='0.0.0.0')
```

Q Type a file name

```
1 # Sample code to demonstrate GCP Debugger
2 from flask import Flask
3 import re
4 app = Flask(__name__)
5
6 @app.route('/')
7 def hello_world():
8     return 'Hello World! - testing debugger'
9
10 @app.route('/add/<int_list>')
11 # Thanks to :
12 # https://stackoverflow.com/questions/35437180/capture-a-list-of-integers-with-a-flask-route
13 def index(int_list):
14     # Make sure it is a list that only contains integers.
15     if not re.match(r'^\d+(?:,\d+)*,?$$', int_list):
16         return "Please input a list of integers, split with ','"
17     result = sum(int(i) for i in int_list.split(','))
18     return "{}".format(result)
19
20 if __name__ == '__main__':
21     app.run(host='0.0.0.0')
```

Snapshot Logpoint

helloDebug.py:17

Condition: (Optional)

Type a condition

Expressions: (Optional)

Type an expression

Variables 2018-03-22 (12:51:39)

int_list	u'1,2,2'
----------	----------

Call Stack

index	helloDebug.py:17
Flask.dispatch_request	app.py:1598
Flask.full_dispatch_request	app.py:1612
Flask.wsgi_app	app.py:1982
Flask.__call__	app.py:1997
execute	servicing.py:258
WSGIRequestHandler.run_wsgi	servicing.py:270
WSGIRequestHandler.handle_one_request	servicing.py:328

[102]

Chapter 7: Best Practice

Service Accounts [+ CREATE SERVICE ACCOUNT](#) [DELETED](#) [+ PERMISSIONS](#)

A service account represents a Google Cloud service identity, such as code running on Compute Engine VMs, App Engine apps, or systems running outside Go

Find a service account

<input type="checkbox"/> Service account name ▾	Service account ID	Key ID
<input type="checkbox"/> securitymonkey	securitymonkey@upbeat-aura-163616.iam.gserviceaccount.com	2c85a1b13995368434966a200972d036e42c48c0

View By: [MEMBERS](#) [ROLES](#)

Filter table

<input type="checkbox"/> Type	Member ↑	Name	Role	Inheritance	
<input type="checkbox"/>	securitymonkey@upbeat-aura-163616.iam.gserviceaccount.com	securitymonkey	Security Reviewer Viewer		

Non sécurisé | <https://35.192.157.150/login?next=https%3A%2F%2F35.192.157.150%2F>

Security Monkey

Login

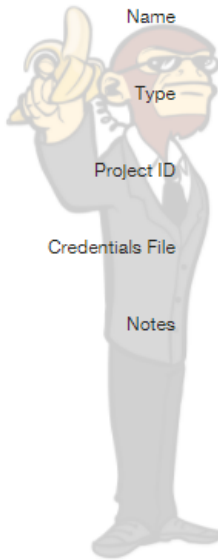
OR

Remember me

[Sign in](#)



Edit Account



Name

test-env

Type

GCP

Project ID

upbeat-aura-163616

Credentials File

/home/<userid>/cred.txt

Notes

Notes

Active [?](#) - (Should be scanned by security monkey.)

Third Party [?](#)

Save

Delete

← → ↻ Non sécurisé | https://35.192.157.150/#/dashboard

Security Monkey Dashboard Search Internet Accessible Cross Account Reports Settings

Accounts

Recalculate Scores

Clear All Account ↑↓ Score ↓↑


<input checked="" type="checkbox"/>	test-env	232
-------------------------------------	----------	-----

Technology Issue Scores

Technology ↑↓	Score ↓↑
gcefirewallrule	120
gcsbucket	112
iamserviceaccount	0
gcenetwork	0



High Score Items

Account	Technology
test-env	gcsbucket
test-env	gcsbucket
test-env	gcsbucket
test-env	gcsbucket
test-env	gcsbucket
test-env	gcsbucket



Aging Issues

Account	Technology	Item Name	Issue	Score
test-env	gcefirewallrule	beta-nw-firewall	Source range open. Traffic permitted from any host.	7
test-env	gcefirewallrule	beta-nw-firewall	Target Tags Not Found in Firewall Rule.	3
test-env	gcefirewallrule	k8s-fw-a972c031f58df11e789d142010a80004	Source range open. Traffic permitted from any host.	7
test-env	gcefirewallrule	mongo	Source range open. Traffic permitted from any host.	7

<input type="checkbox"/>	Name ^	Type	Size	Zone	In use by
<input type="checkbox"/>	 disk-1	Standard persistent disk	10 GB	us-central1-c	

<input type="checkbox"/>	Name ^	Zone	Recommendation	Internal IP	External IP	Connect
<input type="checkbox"/>	 instance-1	us-central1-c		10.128.0.2	104.198.165.213	SSH  

Boot disk and local disks				
Name	Size (GB)	Type	Mode	
instance-1	10	Standard persistent disk	Boot, read/write	
<input checked="" type="checkbox"/> Delete boot disk when instance is deleted				
Additional disks				
Name	Size (GB)	Type	Mode	When deleting instance
disk-1	10	Standard persistent disk	Read/write	Keep disk

Cloud API access scopes	
BigQuery	Disabled
Bigtable Admin	Disabled
Bigtable Data	Disabled
Cloud Datastore	Disabled
Cloud Debugger	Disabled
Cloud Pub/Sub	Disabled
Cloud Source Repositories	Disabled
Cloud SQL	Disabled
Compute Engine	Read Write
Service Control	Enabled
Service Management	Read Only
Stackdriver Logging API	Write Only
Stackdriver Monitoring API	Write Only
Stackdriver Trace	Write Only
Storage	Read Only
Task queue	Disabled
User info	Disabled

<input type="checkbox"/> Name ^	Source disk	Creation time	Disk size	Snapshot size
<input type="checkbox"/>  gcs-disk-1-7023749120190379755-1522880728	disk-1	      	10 GB	0 B
<input type="checkbox"/>  gcs-disk-1-7023749120190379755-1522883446	disk-1	      	10 GB	364.5 KB
<input type="checkbox"/>  gcs-instance-1-7023749120190379755-1522880728	instance-1	      	10 GB	504.86 MB
<input type="checkbox"/>  gcs-instance-1-7023749120190379755-1522883446	instance-1	      	10 GB	8.15 MB

← Snapshots 🗑️ DELETE ➕ CREATE INSTANCE

✔️ gcs-instance-1-7023749120190379755-1522883446

Source disk
instance-1

Disk size ?
10 GB

Snapshot size ?
8.15 MB

← Create an instance

Name ?
instance-2

Zone ?
us-central1-c


Machine type
Customize to select cores, memory and GPUs.

micro (1 shared... 0.6 GB memory [Customize](#)

[Upgrade your account](#) to create instances with up to 96 cores

Container ?
 Deploy a container image to this VM instance. [Learn more](#)

Boot disk ?

 New 10 GB standard persistent disk
Snapshot
gcs-instance-1-702374912019037975... [Change](#)

Compute Engine
Read Write

Management **Disks** Networking SSH Keys

Deletion rule
 Delete boot disk when instance is deleted

Encryption ?
 Automatic (recommended) ▾

Additional disks ? (Optional)

Name	Mode	When deleting instance
disk-1-bkup	Read/write ▾	Keep disk ▾

[+ Add item](#)

<input type="checkbox"/>	Name ^	Zone	Recommendation	Internal IP	External IP	Connect
<input checked="" type="checkbox"/>	instance-1	us-central1-c		10.128.0.2	35.184.244.82	SSH ▾

<input type="checkbox"/>	Name ^	Type	Size	Zone	In use by	
<input checked="" type="checkbox"/>	instance-1	Standard persistent disk	10 GB	us-central1-c	instance-1	⋮

- [+ Create instance](#)
- [+ Create snapshot](#)
- [🗑 Delete](#)

← Create a disk

Name [?]

Description (Optional)

Zone [?]

Disk Type [?]

Source type [?]

Source snapshot [?]

Size (GB) [?] (Optional)

<input type="checkbox"/>	Name ^	Type	Size	Zone	In use by	
<input type="checkbox"/>	✓ instance-1	Standard persistent disk	10 GB	us-central1-c	instance-1	⋮
<input type="checkbox"/>	✓ temp-disk	Standard persistent disk	15 GB	us-central1-c		⋮
<input type="checkbox"/>	✓ toraw-disk-1	Standard persistent disk	10 GB	us-central1-c		⋮

Management **Disks** Networking SSH Keys

Deletion rule
 Delete boot disk when instance is deleted

Encryption ?
Automatic (recommended) ▼

Additional disks ? (Optional)

Name	Mode	When deleting instance	
toraw-disk-1	Read/write ▼	Keep disk ▼	✕
temp-disk	Read/write ▼	Keep disk ▼	✕

[+ Add item](#)

Storage
Read/Write ▼

← Create an image

Name ?

Family (Optional) ?

Description (Optional)

Encryption ?


Source ?

Cloud Storage file ?

Your image source must use the .tar.gz extension and the file inside the archive must be named disk.raw. [Learn more](#)

 images001/myimage.tar.gz

Images [+] CREATE IMAGE ↻ REFRESH

 Filter images

<input type="checkbox"/>	Name	Size
<input type="checkbox"/>	<input checked="" type="checkbox"/> image-1	10 GB

[←](#) **Create an instance**

Name [?](#)
restored-instance

Zone [?](#)
us-east1-b [▼](#)


Machine type
Customise to select cores, memory and GPUs.

micro (1 shared... [▼](#) 0.6 GB memory [Customise](#)

[Upgrade your account](#) to create instances with up to 96 cores

Container [?](#)
 Deploy a container image to this VM instance. [Learn more](#)

Boot disk [?](#)

 New 10 GB standard persistent disk
Image
image-1 [Change](#)

Compute Engine

Read/Write

Service Control

Enabled

Service Management

Read Only

Stackdriver Logging API

Write Only

Stackdriver Monitoring API

Write Only

Stackdriver Trace

Write Only

Storage

Full

<input type="checkbox"/>	Name	Size
<input type="checkbox"/>	<input checked="" type="checkbox"/> packer-1523057779	10 GB

← Images 🗑️ DELETE + CREATE INSTANCE

packer-1523057779


Description
Created by Packer

Creation time
7 Apr 2018, 01:39:28

Encryption
Automatic

Equivalent [REST](#)

http://35.196.32.252/info.php

PHP Version 7.0.27-0+deb9u1


System	Linux instance-2 4.9.0-6-amd64 #1 SMP Debian 4.9.82-1+deb9u3 (2018-03-02) x86_64
Build Date	Jan 5 2018 13:51:52
Server API	Apache 2.0 Handler
Virtual Directory Support	disabled