

GCP Project

Create three users for Owner, Editor and Viewer role.

Go to service account.

Create service account



1 Service account details

Service account name

Admins

Display name for this service account

Service account ID *

admins



Email address: admins@prac-project-351313.iam.gserviceaccount.com



Service account description

Describe what this service account will do

Select role.

Create service account

✓

Service account details

2

Grant this service account access to project (optional)

Grant this service account access to Prac-Project so that it has permission to complete specific actions on the resources in your project. [Learn more](#)

Role

Owner

▼

Full access to most Google Cloud resources. See the list of included permissions.

Condition

[Add condition](#)

+ ADD ANOTHER ROLE

User created.

Service accounts

[+ CREATE SERVICE ACCOUNT](#)

[DELETE](#)

[+ MANAGE ACCESS](#)

[REFRESH](#)

[HELP](#)

[ASSIST](#)

Organization policies can be used to secure service accounts and block risky actions, such as automatic IAM Grants, key creation/upload, or the creation of new service accounts entirely. [Learn more about service account organization policies](#)

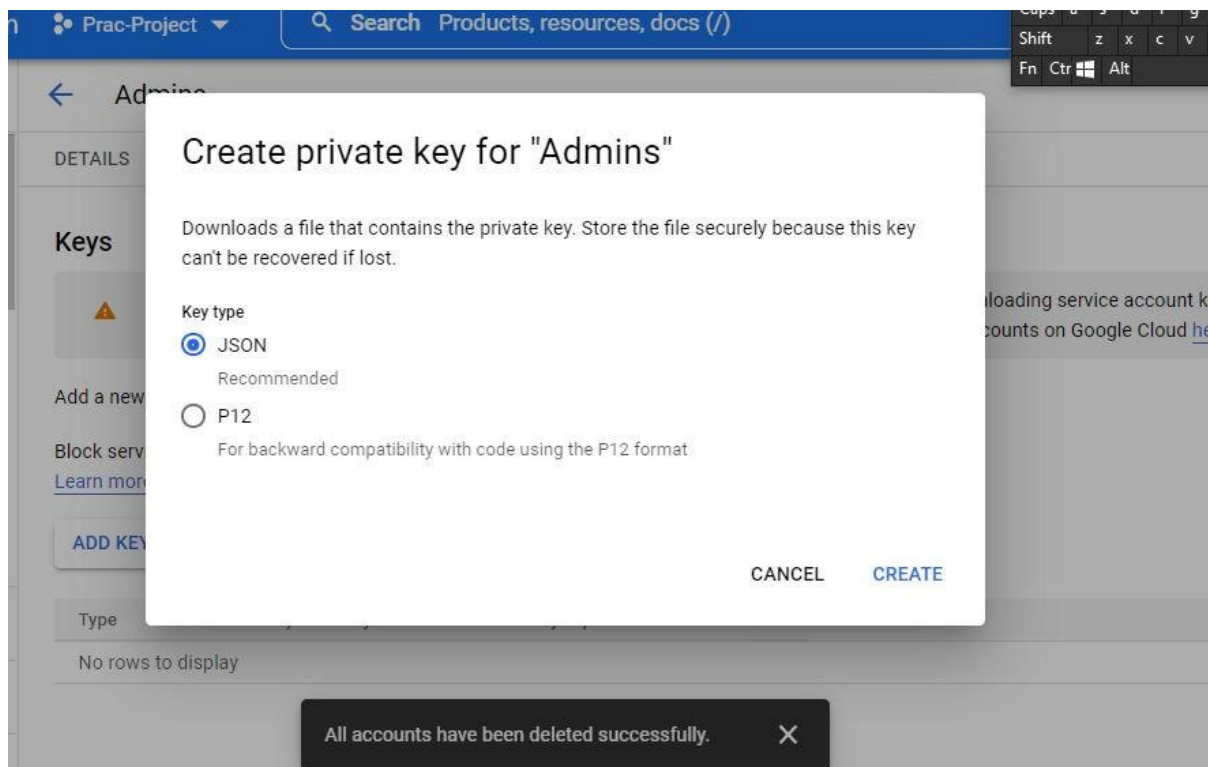
Select at least one service account

Filter

Enter property name or value

<input type="checkbox"/>	Email	Status	Name ↑	Description	Key ID	Key creation date	OAuth	Actions
<input type="checkbox"/>	admins@prac-project-351313.iam.gserviceaccount.com	✓	Admins		No keys		100%	<div>⋮</div>

Generate key.



← Admins

DETAILS PERMISSIONS KEYS METRICS LOGS

Keys

⚠️ Service account keys could pose a security risk if compromised. We recommend you avoid downloading service account keys. See [Workload Identity Federation](#) . You can learn more about the best way to authenticate service accounts on Google Cloud.

Add a new key pair or upload a public key certificate from an existing key pair.

Block service account key creation using [organization policies](#).
[Learn more about setting organization policies for service accounts](#)

ADD KEY ▾

Type	Status	Key	Key creation date	Key expiration date
🔑	✓ Active	62552769b6fb735a975e69247cb29cde52bbe4e4	Jun 12, 2022	Jan 1, 10000

Similarly, Create QA and Workers.

Service accounts

+ CREATE SERVICE ACCOUNT






DELETE

+ MANAGE ACCESS

REFRESH

HELP ASSI

Filter Enter property name or value

<input type="checkbox"/>	Email	Status	Name ↑	Description	Key ID	Action
<input type="checkbox"/>	 <u>admins@prac-project-351313.iam.gserviceaccount.com</u>	✓	Admins		62552769b6fb735a975e69247cb2	⋮
<input type="checkbox"/>	 <u>prac-project-351313@appspot.gserviceaccount.com</u>	✓	App Engine default service account		No keys	⋮
<input type="checkbox"/>	 <u>360386619929-compute@developer.gserviceaccount.com</u>	✓	Compute Engine default service account		No keys	⋮
<input type="checkbox"/>	 <u>qa-847@prac-project-351313.iam.gserviceaccount.com</u>	✓	QA		0ef9dfa40e6d295cef527bcca8bd4	⋮
<input type="checkbox"/>	 <u>workers@prac-project-351313.iam.gserviceaccount.com</u>	✓	Workers		5da99a9a6e73372196755ab1e86e	⋮

Now, We need to create one project and create a server .

Select a project		NEW
<input type="text" value="Search projects and folders"/>		
RECENT	STARRED	ALL
Name		ID
✓ ☆ ⋮	Prac-Project ?	prac-project-351313
☆ ⋮	<u>My First Project ?</u>	<u>rising-analogy-351312</u>
☆ ⋮	My First Project ?	core-gearbox-351412
☆ ⋮	My First Project ?	arctic-task-351314
☆ ⋮	My First Project ?	mineral-parser-351314
☆ ⋮	My First Project ?	ambient-scion-351312

Create a VPC.

▼ vpc2	1	1460	Custom	None		
asia-east1	subnet2		192.168.7.0/24	None	None	

Create a VM inside that VPC.

VM instances

[CREATE INSTANCE](#) [OPERATIONS](#) [HELP ASSISTANT](#) [LEARN](#) [SHOW INFO](#)

[INSTANCES](#) [INSTANCE SCHEDULES](#)

VM instances are highly configurable virtual machines for running workloads on Google infrastructure. [Learn more](#)

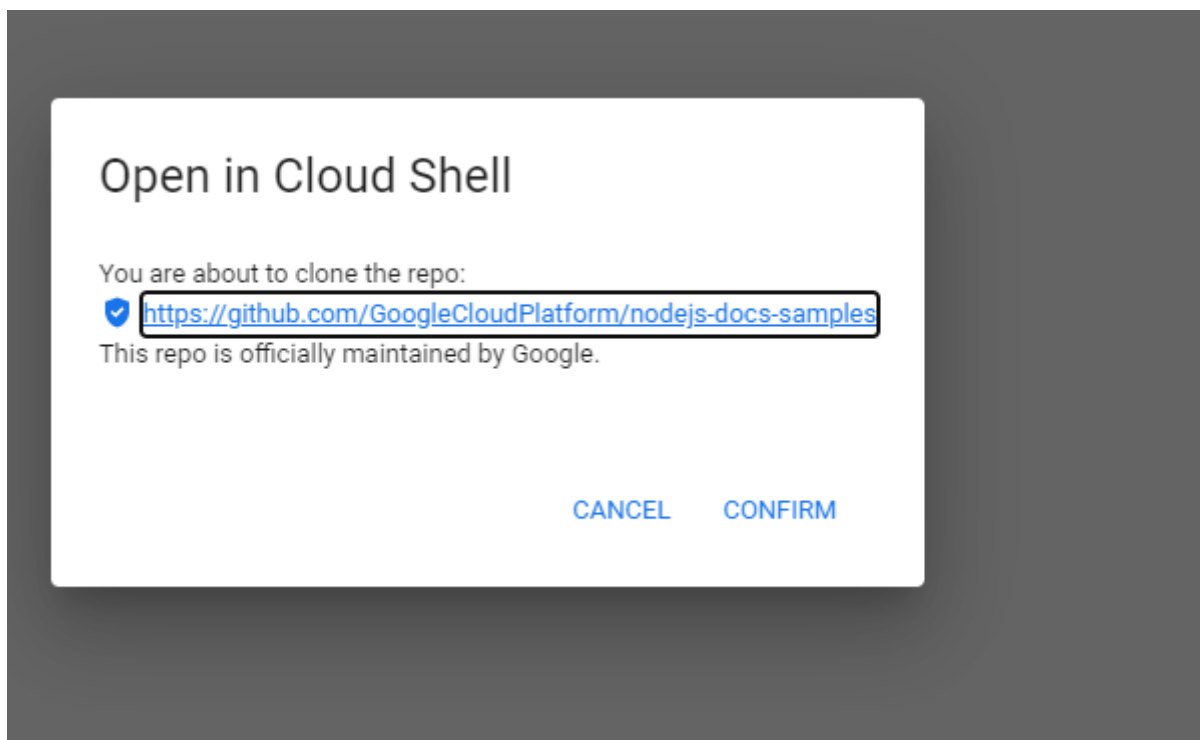
Filter Enter property name or value

<input type="checkbox"/>	Status	Name ↑	Zone	Recommendations	In use by	Internal IP	External IP	Connect	
<input type="checkbox"/>	✓	instance-1	asia-east1-b			192.168.7.2 (nic0)	35.234.41.255 (nic0)	SSH	⋮

1. Deploy the application, on app service which can be scaled up and down from 2 instances to 10 instances using apache tools.

Go to gcloud.

Clone the below repository.



```
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]"
arpitacs0024@cloudshell:~$ gcloud config set project [PROJECT_ID]
2022/06/12 08:39:39 Cloning https://github.com/GoogleCloudPlatform/nodejs-docs-samples into /home/arpitacs0024/cloudshell_open/nodejs-docs-samples-7
Cloning into '/home/arpitacs0024/cloudshell_open/nodejs-docs-samples-7'...
remote: Enumerating objects: 27699, done.
remote: Counting objects: 100% (14/14), done.
remote: Compressing objects: 100% (14/14), done.
remote: Total 27699 (delta 3), reused 3 (delta 0), pack-reused 27685
Receiving objects: 100% (27699/27699), 21.01 MiB | 15.57 MiB/s, done.
Resolving deltas: 100% (18607/18607), done.
arpitacs0024@cloudshell:~/cloudshell_open/nodejs-docs-samples-7$
```

Go inside the below folder.

```
arpitacs0024@cloudshell:~/cloudshell_open/nodejs-docs-samples-7$ cd appengine/hello-world/standard
arpitacs0024@cloudshell:~/cloudshell_open/nodejs-docs-samples-7/appengine/hello-world/standard$ ls
app.js  app.yaml  package.json  README.md  test
arpitacs0024@cloudshell:~/cloudshell_open/nodejs-docs-samples-7/appengine/hello-world/standard$
```

Install dependencies.

```
arpitacs0024@cloudshell:~/cloudshell_open/nodejs-docs-samples-7/appengine/hello-world/standard$ npm install
( [REDACTED] ) "idealTree:standard: [REDACTED] idealTree buildDeps
```

```
round 0 vulnerabilities
arpitacs0024@cloudshell:~/cloudshell_open/nodejs-docs-samples-7/appengine/hello-world/standard$ npm start

> appengine-hello-world@0.0.2 start
> node app.js

App listening on port 8080
Press Ctrl+C to quit.
```

Web preview.

```
← → C 8080-cs-558976651576-default.cs-asia-southeast1-ajrg.cloudshell.dev/?authuser=0&redirectedPreviously=true

Hello, world!
```

Deploy the Hello World app on App Engine by running the following command.

```
arpitacs0024@cloudshell:~/cloudshell_open/nodejs-docs-samples-7/appengine/hello-world/standard (prac-project-351313)$ gcloud app deploy
Services to deploy:

descriptor:      [/home/arpitacs0024/cloudshell_open/nodejs-docs-samples-7/appengine/hello-world/standard/app.yaml]
source:          [/home/arpitacs0024/cloudshell_open/nodejs-docs-samples-7/appengine/hello-world/standard]
target project:  [prac-project-351313]
target service:  [default]
target version:  [20220612t085654]
target url:      [https://prac-project-351313.uc.r.appspot.com]
target service account: [App Engine default service account]

Do you want to continue (Y/n)?

Beginning deployment of service [default]...
Created .gcloudignore file. See 'gcloud topic gcloudignore' for details.
Uploading 1 file to Google Cloud Storage
100%
100%
File upload done.
Updating service [default]...working
```

Browse the application.

```
To view your application in the web browser run:
$ gcloud app browse
arpitacs0024@cloudshell:~/cloudshell_open/nodejs-docs-samples-7/appengine/hello-world/standard (prac-project-351313)$ gcloud app browse
Did not detect your browser. Go to this link to view your app:
https://prac-project-351313.uc.r.appspot.com
arpitacs0024@cloudshell:~/cloudshell_open/nodejs-docs-samples-7/appengine/hello-world/standard (prac-project-351313)$
```

Hello, world!

We need to create instance in same region as app engine.



Create a VPC in first project.

	us-central1	subnet		10.200.0.0/20	None	None
▼ vpc1		1	1460	Custom	None	
	us-central1	subnet1		10.21.0.0/24	None	None

Instance created.

VM instances [CREATE INSTANCE](#) [OPERATIONS](#) [HELP ASSISTANT](#) [SHOW INFO PANEL](#) [LEA](#)

INSTANCES INSTANCE SCHEDULES

VM instances are highly configurable virtual machines for running workloads on Google infrastructure. [Learn more](#)

Filter Enter property name or value ? ⋮

<input type="checkbox"/>	Status	Name ↑	Zone	Recommendations	In use by	Internal IP	External IP	Connect
<input type="checkbox"/>	✓	instance-1	us-central1-c			10.21.0.2 (nic0)	34.70.91.141 (nic0)	SSH ⌵ ⋮

Related actions [HIDE](#)

Update the VM and install apache utils.

```

Reading package lists... Done
arpitacs0024@instance-1:~$ sudo apt-get install apache2-utils
Reading package lists... Done
Building dependency tree... Done
Reading state information... Done
The following additional packages will be installed:
  libapr1 libaprutil1
The following NEW packages will be installed:
  apache2-utils libapr1 libaprutil1
0 upgraded, 3 newly installed, 0 to remove and 7 not upgraded.
Need to get 456 kB of archives.
After this operation, 1089 kB of additional disk space will be used.
Do you want to continue? [Y/n]

```

Run the below command for 5000 requests- Auto scaling

```

arpitacs0024@instance-1:~$ ab -n 5000 -c 1000 https://prac-project-351313.uc.r.appspot.com/
This is ApacheBench, Version 2.3 <$Revision: 1879490 $>
Copyright 1996 Adam Twiss, Zeus Technology Ltd, http://www.zeustech.net/
Licensed to The Apache Software Foundation, http://www.apache.org/

Benchmarking prac-project-351313.uc.r.appspot.com (be patient)
Completed 500 requests
Completed 1000 requests
Completed 1500 requests
Completed 2000 requests
Completed 2500 requests
Completed 3000 requests
Completed 3500 requests
Completed 4000 requests
Completed 4500 requests

```

Multiple requests .

```

Every 2.0s: gcloud app instances list                                cs-558976651576-default: Tue Jun  7 16:04:07 2022

SERVICE: default
VERSION: ver1
ID: 00c61b117ca63c99f55f0de492509277fe45517b6c7f20736532552633daeff1b03d28f3e2bfead92ea46b4ae62cc507d4e11e4b7686a
VM STATUS: N/A
VM LIVENESS:
DEBUG_MODE:

SERVICE: default
VERSION: ver2
ID: 00c61b117c007637d88d93148b605e9f50301dc91b2c849df4b20f0bb553c7bbc9de9e1247cf41fd9ff843b8724ff2b48493fd9450067105f28e2cf
VM STATUS: N/A
VM LIVENESS:
DEBUG_MODE:

SERVICE: default
VERSION: ver2
ID: 00c61b117c4f4c3558e8f462eb78e605e9f9387027edd168959c2bf76a5abdd1936013c5dd81f873a83db81de344dde79d9f1149cbb5f5d8d44ea73

```


Multiple instances provisioned.

App Engine	Instances	REFRESH	DELETE	LEARN
Dashboard	Instances ?			
Services				
Versions				
Instances				
Task queues				
Cron jobs				
Security scans				
Firewall rules				
Quotas				
Release Notes				

<input type="checkbox"/>	ID ↑	QPS ?	Latency ?	Requests	Errors	Memory
<input type="checkbox"/>	00c61b117c007637d88d93148b605e7	0	0 ms	1405	0	56.6 MB
<input type="checkbox"/>	00c61b117c4f4c3558e8f462eb78e605	0	0 ms	1058	0	55.8 MB
<input type="checkbox"/>	00c61b117c609d5b962380ccc5dd35d	0	0 ms	574	0	59.1 MB
<input type="checkbox"/>	00c61b117c665de9473660da1e9c9f1	0	0 ms	1055	0	55.3 MB
<input type="checkbox"/>	00c61b117c78279411d508d7a72e612	0	0 ms	354	0	54.6 MB
<input type="checkbox"/>	00c61b117c8867f54787a501f469884	0	0 ms	110	0	53.9 MB
<input type="checkbox"/>	00c61b117cee2d11e44ee4bd9d9d9f8	0	0 ms	127	0	54.1 MB

2. Now, We need to configure vpc peering so that VM of different project VPC able to connect.

In 1st project

Create peering connection

Network peering list

Name *

vpcpeering01

Lowercase letters, numbers, hyphens allowed

Your VPC network *

vpc1

Peered VPC network

☐ In project prac-project-351313

☒ In another project

Project ID *

rising-analogy-351312

VPC network name *

vpc2

Exchange custom routes ?

You can choose to import or export static and dynamic routes over the VPC peering connection

☐ Import custom routes ?

VPC network peering + CREATE PEERING CONNECTION REFRESH DELETE							
Filter Enter property name or value ? ⋮							
<input type="checkbox"/>	Name ↑	Your VPC network	Peered VPC network	Peered project ID	Status	Exchange custom routes	Exchange
<input type="checkbox"/>	vpcpeering01	vpc1	vpc2	rising-analogy-351312	Active	None	Export s

Similarly, Create in 2nd project.

VPC network peering + CREATE PEERING CONNECTION REFRESH DELETE							
Filter Enter property name or value ? ⋮							
<input type="checkbox"/>	Name ↑	Your VPC network	Peered VPC network	Peered project ID	Status	Exchange custom routes	Exchange
<input type="checkbox"/>	vpcpeering01	vpc2	vpc1	prac-project-351313	Active	None	Export :

Try to ping one vm from another vm.

SSH-in-browser

```

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.
Last login: Fri Jun 10 10:14:51 2022 from 35.235.244.82
arpitacs0024@instance-1:~$ ip ad
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN group de
fault qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid lft forever preferred_lft forever
2: ens4: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1460 qdisc mq state UP group
default qlen 1000
    link/ether 42:01:c0:a8:07:02 brd ff:ff:ff:ff:ff:ff
    altname enp0s4
    inet 192.168.7.2/32 brd 192.168.7.2 scope global dynamic ens4
        valid lft 3160sec preferred_lft 3160sec
    inet6 fe80::4001:c0ff:fea8:702/64 scope link
        valid lft forever preferred_lft forever
arpitacs0024@instance-1:~$

```

SSH-in-browser

```

linux instance-1 5.10.0-14-cloud-amd64 #1 SMP Debian 5.10.113-1 (2022-
4-29) x86_64

The programs included with the Debian GNU/Linux system are free softwa
re; 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.
arpitacs0024@instance-1:~$ ip ad
1: lo: <LOOPBACK,UP,LOWER_UP> mtu 65536 qdisc noqueue state UNKNOWN gr
oup default qlen 1000
    link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00
    inet 127.0.0.1/8 scope host lo
        valid lft forever preferred_lft forever
    inet6 ::1/128 scope host
        valid lft forever preferred_lft forever
2: ens4: <BROADCAST,MULTICAST,UP,LOWER_UP> mtu 1460 qdisc mq state UP
group default qlen 1000
    link/ether 42:01:0a:15:00:02 brd ff:ff:ff:ff:ff:ff
    altname enp0s4
    inet 10.21.0.2/32 brd 10.21.0.2 scope global dynamic ens4
        valid lft 3094sec preferred_lft 3094sec
    inet6 fe80::4001:aff:fel5:2/64 scope link
        valid lft forever preferred_lft forever
arpitacs0024@instance-1:~$

```

Able to ping both vm from each other.

```

    valid lft forever preferred_lft forever
arpitacs0024@instance-1:~$ ping 10.21.0.2
PING 10.21.0.2 (10.21.0.2) 56(84) bytes of data.
64 bytes from 10.21.0.2: icmp_seq=1 ttl=64 time=158 ms
64 bytes from 10.21.0.2: icmp_seq=2 ttl=64 time=156 ms
64 bytes from 10.21.0.2: icmp_seq=3 ttl=64 time=156 ms
64 bytes from 10.21.0.2: icmp_seq=4 ttl=64 time=153 ms
64 bytes from 10.21.0.2: icmp_seq=5 ttl=64 time=153 ms
^C
--- 10.21.0.2 ping statistics ---
5 packets transmitted, 5 received, 0% packet loss, time 4005ms
rtt min/avg/max/mdev = 153.157/155.312/157.769/1.834 ms
arpitacs0024@instance-1:~$

```

```

arpitacs0024@instance-1:~$ ping 192.168.7.2
PING 192.168.7.2 (192.168.7.2) 56(84) bytes of data.
64 bytes from 192.168.7.2: icmp_seq=1 ttl=64 time=152 ms
64 bytes from 192.168.7.2: icmp_seq=2 ttl=64 time=154 ms
64 bytes from 192.168.7.2: icmp_seq=3 ttl=64 time=154 ms
64 bytes from 192.168.7.2: icmp_seq=4 ttl=64 time=154 ms
64 bytes from 192.168.7.2: icmp_seq=5 ttl=64 time=154 ms
64 bytes from 192.168.7.2: icmp_seq=6 ttl=64 time=154 ms
^C
--- 192.168.7.2 ping statistics ---
6 packets transmitted, 6 received, 0% packet loss, time 5006ms
rtt min/avg/max/mdev = 151.900/153.755/154.458/0.851 ms
arpitacs0024@instance-1:~$

```

3. The app service will be interacting with a database, for now the database exists in a local system, here is the exported database . Use this and import in Cloud SQL.

Create a Bucket and upload the given db file.

Filter Filter buckets

Name ↑

Created

Location type

Location

Default storage class ?

<input type="checkbox"/>	buc1buc	Jun 13, 2022, 12:05:35 PM	Multi-region	us	Standard	
--------------------------	---------	---------------------------	--------------	----	----------	--

← Bucket details

REFRESH HELP ASSISTANT LEARN

buc1buc

Location

Storage class

Public access

Protection

us (multiple regions in United States)

Standard

Not public

None

OBJECTS

CONFIGURATION

PERMISSIONS

PROTECTION

LIFECYCLE

Buckets > buc1buc

UPLOAD FILES

UPLOAD FOLDER

CREATE FOLDER

MANAGE HOLDS

DOWNLOAD

DELETE

Filter by name prefix only

Filter Filter objects and folders

Show deleted data

<input type="checkbox"/>	Name	Size	Type	Created ?	Storage class	Last modified	Public access ?	Version
<input type="checkbox"/>	FL_insurance_sample.csv	603 B	text/csv	Jun 13, 20...	Standard	Jun 13, 20...	Not public	—

Go to SQL and create an instance.


And import the file from bucket.

Now,Go to Database Migration and Enable the below API.

Google Cloud Platform

My First Project

←




Database Migration API

Google Enterprise API

Manage Cloud Database Migration Service resources on Google Cloud Platform.

TRY THIS API

Create a connection profile.

 Database Migration

Migration jobs

Connection profiles

Connection profiles

[+ CREATE PROFILE](#) [DELETE PROFILE](#)

Connection profiles represent all the info you need to connect to a data source. [Learn more](#)

Filter

Filter connection profiles

<input type="checkbox"/>	Display name	Activity ?	Database engine	Hostn
You haven't created any connection profiles yet.				

select MySQL

Enter details.

←

Create a connection profile

Info to connect to your source

Choose a database engine and you'll see all the details needed for that type of connection profile. [Learn more](#)

Source database engine *

MySQL

Connection profile name *

Myconnprofile

Must be less than 60 characters.13/60

Connection profile ID *

myconnprofile

Lowercase letters, numbers, or hyphens. It must be unique in this project and cannot be changed later.13/60

Hostname or IP address *

192.168.67.114

Port *

3306

Username *

arpi08

Password *

.....

Connection profile region

Connection profiles, like all resources, are saved in a region. Region selection doesn't impact which migration jobs can use them, or which regions can connect to the data location itself, but can impact availability in the case of regional downtime.

Region *
us-central1 (Iowa) ▼

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

Secure your connection

Choose an encryption type, and you'll see the SSL/TLS details needed. [Learn more](#)

Encryption type *
None ▼

CREATE

CANCEL

Connection profile created.

Connection profiles

+

CREATE PROFILE

🗑

DELETE PROFILE

Connection profiles represent all the info you need to connect to a data source. [Learn more](#)

☰

Filter

Filter connection profiles

?

<input type="checkbox"/>	Display name	Activity ?	Database engine	Hostname/IP:Port	Created ↓
<input type="checkbox"/>	Myconnprofile	Inactive	MySQL	192.168.67.114:3306	Jun 12, 2022

Now, Create a migration job.

ation menu

Create a migration job

1 Get started
Not configured

2 Define a source
Not configured

3 Create a destination
Not configured

4 Define connectivity method
Not configured

5 Test and create migration job
Not tested

SAVE & EXIT

CANCEL

now? [Learn more](#)

Migration job name *

migrate1

Must be less than 60 characters. 8/60

Migration job ID *

migrate1

Lowercase letters, numbers, or hyphens. It must be unique in this project and cannot be changed later. 8/60

Source database engine *

MySQL

Destination database engine

Cloud SQL for MySQL

Destination region *

us-central1 (Iowa)

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

Migration job type *

Continuous

Define source.

← Create a migration job

✓ Get started
migratejob, MySQL to Cloud SQL for MySQL (One-time)

2 Define a source
Not configured

3 Create a destination
Not configured

4 Define connectivity method
Not configured

5 Test and create migration job
Not tested

SAVE & EXIT

CANCEL

Source database engine

MySQL

Select source connection profile *

Myconnprofile

Source details

[VIEW DETAILS](#)

Connection profile ID	myconnprofile
Source hostname or IP	192.168.67.114
Port	3306
Username	arpi08
Region	us-central1
Encryption type (SSL/TLS)	None

✓ SHOW DATA DUMP OPTIONS

Create a destination

A new destination instance will be created for your migration job. Provide some basic info for it, and configure as needed. [Learn more](#)

Destination database engine

Cloud SQL for MySQL

Destination Instance ID *

migratejob

Use lowercase letters, numbers, and hyphens. Start with a letter. Note that the ID can't be changed later.

Password *

.....



GENERATE

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

Database version *

Cloud SQL for MySQL 5.7



Can be at most one version above the source version

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

Database version *

Cloud SQL for MySQL 5.7



Can be at most one version above the source version

Choose region and zone

For better performance, keep your data close to the services that need it. Region is permanent, while zone can be changed any time.

Region

us-central1 (Iowa)



Zone *

us-central1-c



Configure your destination instance

You can customize the new instance associated with this migration job. Choices affect billing according to [Cloud SQL Pricing](#).

Connections

Choose a network path for connecting to this instance. For extra security, consider

Machine Type

Choose a preset or customize your own. For better performance, choose a machine type with enough memory to hold your largest table.

High memory ▼

- ☒ 4 vCPU, 26 GB
- ☐ 8 vCPU, 52 GB
- ☐ 16 vCPU, 104 GB
- ☐ Custom

Storage

Storage type

Choice is permanent. Storage type affects performance.

- ☒ SSD (Recommended)
Most popular choice. Lower latency than HDD with higher QPS and data throughput.
- ☐ HDD



If you plan on migrating via IP allowlist, then select the Public IP check box. If you plan on migrating via VPC-peering or Reverse SSH tunnel, then select the Private IP check box.

☐ Private IP

Requires additional APIs and permissions, which may require your system admins. Can't be disabled once enabled. [Learn more](#)



The [Service Networking API](#) must be enabled in order to enable Private IP for this instance.

RETRY

☒ Public IP

Authorize a network or use [Cloud SQL Proxy](#) to connect to this instance. [Learn more](#)

Authorized networks

[ADD NETWORK](#)


```

app.js app.yaml node_modules package.json package-lock.json README.md test
arpitacs0024@cloudshell:~/cloudshell_open/nodejs-docs-samples-5/appengine/hello-world/standard (prac-project-351313)$
arpitacs0024@cloudshell:~/cloudshell_open/nodejs-docs-samples-5/appengine/hello-world/standard (prac-project-351313)$ vi app.js
arpitacs0024@cloudshell:~/cloudshell_open/nodejs-docs-samples-5/appengine/hello-world/standard (prac-project-351313)$ gcloud app deploy -v ver2
Services to deploy:

descriptor:      [/home/arpitacs0024/cloudshell_open/nodejs-docs-samples-5/appengine/hello-world/standard/app.yaml]
source:          [/home/arpitacs0024/cloudshell_open/nodejs-docs-samples-5/appengine/hello-world/standard]
target project:  [prac-project-351313]
target service:  [default]
target version:  [ver2]
target url:      [https://prac-project-351313.uc.r.appspot.com]
target service account: [App Engine default service account]

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

Beginning deployment of service [default]...

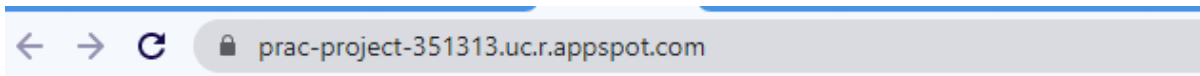
```

Browse it.

```

arpitacs0024@cloudshell:~/cloudshell_open/nodejs-docs-samples-5/appengine/hello-world/standard (prac-project-351313)$ gcloud app browse
Did not detect your browser. Go to this link to view your app:
https://prac-project-351313.uc.r.appspot.com
arpitacs0024@cloudshell:~/cloudshell_open/nodejs-docs-samples-5/appengine/hello-world/standard (prac-project-351313)$

```



Hello, world from intellipaas

Versions									
REFRESH DELETE STOP START MIGRATE TRAFFIC LEARN SHOW INFO PANEL									
Filter Filter versions									
<input type="checkbox"/>	Version	Status	Traffic Allocation	Instances	Runtime	Environment	Size		
<input type="checkbox"/>	ver2	Serving	<div><div></div></div> 100%	0	nodejs14	Standard	4.3 MB	pi	3
<input type="checkbox"/>	ver1	Serving	<div><div></div></div> 0%	0	nodejs14	Standard	4.3 MB	pi	3

5. Configure Stackdriver monitoring to monitor the storage server, and email should be triggered to the owner of the project in case this server goes down.

Go to stackdriver > Monitoring

Create a alert.

Monitoring

Metrics Scope
1 project

Overview

Dashboards

Integrations **NEW**

Services

Metrics explorer

Alerting

Uptime checks

Overview

GET STARTED WITH MONITORING

Complete these steps to better understand your system

- ✓ Integrate with Google Cloud services
Monitor cloud resources with zero configuration
- **Install an agent**
Collect additional system and application metrics
- Create a dashboard
Visually analyze metrics important to you
- **Create an alert**
Resolve problems quickly with timely notifications

Now, Create a alert policy.

Alerting

Respond to performance problems before they affect your customers by configuring alerting policies to notify you when events occur or particular system or custom metrics violate rules that you define. Use multiple conditions to define complex alerting rules.

Leverage built-in integrations to receive notifications via email, SMS, Slack, PagerDuty, and more.

CREATE ALERT POLICY [Explore sample policies](#) [Manage using API](#)

Select metric VM instance. Select metric as uptime.

VM Instance - Traffic for apache [RATE]

1H

CUSTOM

METRIC

UPTIME CHECK

PROCESS HEALTH

1

Target ?

<> Query Editor

Find resource type and metric ?

Resource type: VM Instance x

Metric: Traffic x

Filter ?

server_name = "apache" x + Add a filter

Group By ?

+ Add a label

Aggregator ?

none

ADD

CANCEL

4

UTC+5:30

1 What do you want to track?

Conditions

Conditions describe when apps and services are considered unhealthy. When conditions are met, they trigger alerting policy violations.

Condition	Actions
VM Instance - Traffic for apache [RATE] Violates when: Any agent.googleapis.com/apache/traffic stream is above a threshold of 9	 


[ADD CONDITION](#)

[NEXT](#)

2 Who should be notified? (optional)

Add notification channel and add email.

← Notification channels

Slack 

[ADD NEW](#)

No Slack channels configured



Webhooks



[ADD NEW](#)

No webhook channels configured

Email

[ADD NEW](#)

 Filter Filter email addresses 

Email	Display Name	
arpitacs0024@gmail.com	arpita	 

SMS

[ADD NEW](#)

No SMS channels configured

Cloud Pub/Sub

[ADD NEW](#)

✓ **What do you want to track?**

VM Instance - Traffic for apache [RATE]

2 **Who should be notified? (optional)**

When alerting policy violations occur, you will be notified via these channels.

Notification Channels

arpita



We recommend at least 2 notification channels of different channel types for resilience to failures for a single channel type.

You will always receive a notification when incidents are open. Select when you would like to receive additional notifications.

☐ Notify on incident closure

Name the alert.

Prac-Project

Search Products, resources, docs (/)

←

Create alerting policy

3

What are the steps to fix the issue?

Alert policy name *

Alert5

Enter any documentation you would like included with the notification. You can use markdown, variables, and channel-specific controls. Markdown formatting may not apply to all notification channels.

Your alert policies may trigger messages that include personal data. Please use appropriate communication channels for these alerts and confirm that the alert recipients are authorized to receive such data.

Documentation

?

SAVE

CANCEL

Policy created for apache service.

←	Policy details	ENABLED	EDIT	COPY	⋮	✓ 1 hour	6 hours	1 day	1 week	1 month	6 y
Alert5											
Conditions											
Policy violates when ANY condition is met											
VM Instance - Traffic for apache [RATE]											
Condition type	Triggers when	Threshold position	Threshold value	Retest window							
Threshold	Any time series cross threshold	Above threshold	9	No retest							
<div>🔍 ≡ 🗨 ⋮</div>											