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Lab 1

- Create your project, list your project details



Project info

Project name

ITI-Experiment

Project number

619429842382

Project ID

iti-experiment

[ADD PEOPLE TO THIS PROJECT](#)

[→ Go to project settings](#)

- Set budget and Alerts (b: 20\$/ a: 17,5\$, 10%, 5\$)

✓ Scope

✓ Amount

3 Actions

Set alert threshold rules

Send email alert notifications after the actual or forecasted spend exceeds a percent of the budget or a specified amount. [Learn more](#)

Percent of budget 1 *	Amount 1 *	Trigger on 1
10 %	\$ 2	Actual
Percent of budget 2 *	Amount 2 *	Trigger on 2
25 %	\$ 5	Actual
Percent of budget 3 *	Amount 3 *	Trigger on 3
85 %	\$ 17	Actual

[+ ADD THRESHOLD](#)

Cost trend

October 1, 2022 – October 31, 2023



[→ View report](#)

[Filter](#) Enter property name or value

<input type="checkbox"/>	Budget name ↑	Budget period	Budget type	Applies to	Trigger alerts at	Spend and budget amount
<input type="checkbox"/>	FirstBdgtGCP	Monthly	Specified amount	Project "ITI-Experiment"	10%, 25%, and 85%	\$0.00 / \$20.00 No credits used

- Add your Friend as viewer, What is the role type?

Resource

ITI-Experiment

Add principals

Principals are users, groups, domains, or service accounts. [Learn more about principals in IAM](#)

New principals *

abdelrahman.a171@gmail.com

?

Assign roles

Roles are composed of sets of permissions and determine what the principal can do with this resource. [Learn more](#)

Role *

Viewer

IAM condition (optional) ?

+ ADD IAM CONDITION

View most Google Cloud resources.
See the list of included permissions.

+ ADD ANOTHER ROLE

SAVE

CANCEL

- Restrict his viewer to view the VPC networks only.

Edit access to "ITI-Experiment"

Principal 
 abdelrahman.A171@gmail.com

Project
 ITI-Experiment

Assign roles

Roles are composed of sets of permissions and determine what the principal can do with this resource. [Learn more](#)

Role
 Viewer 

IAM condition (optional) 
 + ADD IAM CONDITION 


View most Google Cloud resources.
 See the list of included permissions.

Role
 Custom Compute Network Viewer 

IAM condition (optional) 
 + ADD IAM CONDITION 

Created on: 2023-10-06 Based on:
 Compute Network Viewer

+ ADD ANOTHER ROLE

SAVE TEST CHANGES  CANCEL

Summary of changes

Roles removed

n/a

Role added

Custom Compute Network V...

TEST CHANGES 

- Create Service account with compute.instances.list & compute.instrnaces.get permissions

← Create Role

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

Title *

Get & List

10 / 100 characters

Description

Created on: 2023-10-06

22 / 256 characters

ID *

CustomRole

Role launch stage

Alpha

+ ADD PERMISSIONS

2 assigned permissions

Filter	Enter property name or value		?	
✓	Permission ↑	Status		
✓	compute.instances.get	Supported		
✓	compute.instances.list	Supported		

Edit access to "ITI-Experiment"

Principal ?
abdelrahman.A171@gmail.com

Project
ITI-Experiment

Assign roles

Roles are composed of sets of permissions and determine what the principal can do with this resource. [Learn more](#)

Role

Custom Compute Network Viewer

Created on: 2023-10-06 Based on: Compute Network Viewer

IAM condition (optional) ?

+ ADD IAM CONDITION

Role

Viewer

View most Google Cloud resources. See the list of included permissions.

IAM condition (optional) ?

+ ADD IAM CONDITION

Role

Get & List

Created on: 2023-10-06

IAM condition (optional) ?

+ ADD IAM CONDITION

+ ADD ANOTHER ROLE

SAVE TEST CHANGES ⓘ CANCEL

Summary of changes

Roles removed

n/a

Role added

Get & List

TEST CHANGES ⓘ



svc-acc@iti-experiment.iam.gserviceaccount.com

svc-acc

Get & List

- Create a python app that prints the projectId (hint : API).

```
from google.oauth2 import service_account

key_file_path = 'D:/Education/ITI/DevOps ITI/Week 14/1 Google Cloud Platform/Day 01/Lab 1/iti-experiment-f54a4147ca0c.json'

credentials = service_account.Credentials.from_service_account_file(
    key_file_path, scopes=['https://www.googleapis.com/auth/cloud-platform'])

project_id = credentials.project_id
print("Project ID:", project_id)
```

```
[Running] python -u "d:\Education\ITI\DevOps ITI\Week 14\1 Google Cloud Platform\Day 01\Lab 1\Lab-1.py"
Project ID: iti-experiment
```

```
[Done] exited with code=0 in 0.574 seconds
```

- List the projects using SDK.

Local

```
D:\Education\ITI\DevOps ITI\Week 14\1 Google Cloud Platform\Day 01\Lab 1>gcloud projects list
PROJECT_ID      NAME                PROJECT_NUMBER
iti-experiment  ITI-Experiment     619429842382
```

GCP shell

```
Welcome to Cloud Shell! Type "help" to get started.
Your Cloud Platform project in this session is set to iti-experiment.
Use "gcloud config set project [PROJECT_ID]" to change to a different project.
seifhendawyl@cloudshell:~ (iti-experiment)$ gcloud projects list
PROJECT_ID: iti-experiment
NAME: ITI-Experiment
PROJECT NUMBER: 619429842382
seifhendawyl@cloudshell:~ (iti-experiment)$
```

- Use the cloud shell to auth the pervious SA and set the current project as your default project.

Local

```
D:\Education\ITI\DevOps ITI\Week 14\1 Google Cloud Platform\Day 01\Lab 1>gcloud config set project iti-experiment
Updated property [core/project].
```

```
D:\Education\ITI\DevOps ITI\Week 14\1 Google Cloud Platform\Day 01\Lab 1>gcloud auth activate-service-account --key-file=iti-experiment-f54a4147ca0c.json
Activated service account credentials for: [svc-acc@iti-experiment.iam.gserviceaccount.com]
```

GCP Shell

```
seifhendawyl@cloudshell:~ (iti-experiment)$ cat iti-experiment-f54a4147ca0c.json
cat: iti-experiment-f54a4147ca0c.json: No such file or directory
seifhendawyl@cloudshell:~ (iti-experiment)$ touch iti-experiment-f54a4147ca0c.json
seifhendawyl@cloudshell:~ (iti-experiment)$ cat iti-experiment-f54a4147ca0c.json
seifhendawyl@cloudshell:~ (iti-experiment)$ vi iti-experiment-f54a4147ca0c.json
seifhendawyl@cloudshell:~ (iti-experiment)$ gcloud auth activate-service-account --key-file=iti-experiment-f54a4147ca0c.json
Activated service account credentials for: [svc-acc@iti-experiment.iam.gserviceaccount.com]
seifhendawyl@cloudshell:~ (iti-experiment)$
```