

```
CLOUD SHELL
Terminal (gke22-368811) x +
Open Edit

⚠ The connection to your Google Cloud Shell was lost.

+ key = (known after apply)
+ values = (known after apply)
}

+ scheduling {
+ automatic_restart = (known after apply)
+ instance_termination_action = (known after apply)
+ min_node_cpus = (known after apply)
+ on_host_maintenance = (known after apply)
+ preemptible = (known after apply)
+ provisioning_model = (known after apply)

+ node_affinities {
+ key = (known after apply)
+ operator = (known after apply)
+ values = (known after apply)
}
}

Plan: 1 to add, 0 to change, 0 to destroy.

Do you want to perform these actions?
Terraform will perform the actions described above.
Only 'yes' will be accepted to approve.

Enter a value: yes

google_compute_instance.terraform: Creating...
google_compute_instance.terraform: Still creating... [10s elapsed]
google_compute_instance.terraform: Creation complete after 13s [id=projects/gke22-368811/zones/us-central1-a/instances/cloudbbuildterraform]

Apply complete! Resources: 1 added, 0 changed, 0 destroyed.
ffpalm@cloudshell:~/terraform-hello/terraform-gcp/terraform-hello (gke22-368811) $
```

```
ffpalm@cloudshell:~/terraform-hello/terraform-gcp/terraform-hello (gke22-368811)$ terraform
show
```

```
# google_compute_instance.terraform:
```

```
resource "google_compute_instance" "terraform" {
```

```
    can_ip_forward      = false
```

```
    cpu_platform        = "Intel Haswell"
```

```
    current_status      = "RUNNING"
```

```
    deletion_protection = false
```

```
    enable_display      = false
```

```
    guest_accelerator   = []
```

```
    id                  =
```

```
"projects/gke22-368811/zones/us-central1-a/instances/cloudbbuildterraform"
```

```
    instance_id        = "2416199963675862311"
```

```
    label_fingerprint  = "42WmSpB8rSM="
```

```
    machine_type       = "n1-standard-1"
```

```

    metadata_fingerprint = "ME2Y6LDtP9o="

    name                  = "cloudbbbuildterraform"

    project                = "gke22-368811"

    self_link              =
"https://www.googleapis.com/compute/v1/projects/gke22-368811/zones/us-central1-a/instances
/cloudbbbuildterraform"

    tags_fingerprint      = "42WmSpB8rSM="

    zone                  = "us-central1-a"


    boot_disk {

        auto_delete = true

        device_name = "persistent-disk-0"

        mode        = "READ_WRITE"

        source       =
"https://www.googleapis.com/compute/v1/projects/gke22-368811/zones/us-central1-a/disks/clo
udbbbuildterraform"

        initialize_params {

            image =
"https://www.googleapis.com/compute/v1/projects/debian-cloud/global/images/debian-11-bulls
eye-v20221206"

            labels = {}

            size    = 10

            type    = "pd-standard"

        }

    }

    network_interface {

```

```

        name                = "nic0"

        network              =
"https://www.googleapis.com/compute/v1/projects/gke22-368811/global/networks/default"

        network_ip          = "10.128.0.28"

        queue_count         = 0

        stack_type          = "IPV4_ONLY"

        subnetwork           =
"https://www.googleapis.com/compute/v1/projects/gke22-368811/regions/us-central1/subnetw
orks/default"

        subnetwork_project = "gke22-368811"

        access_config {

            nat_ip           = "35.222.107.165"

            network_tier = "PREMIUM"

        }
    }

    scheduling {

        automatic_restart    = true

        min_node_cpus        = 0

        on_host_maintenance = "MIGRATE"

        preemptible          = false

        provisioning_model   = "STANDARD"

    }

    shielded_instance_config {

        enable_integrity_monitoring = true

```

```
    enable_secure_boot      = false
    enable_vtpm              = true
}
```

```
gcloud compute instances create instance-1 --project=palma-devops-iac --zone=us-central1-c
--machine-type=e2-medium --network-interface=network-tier=PREMIUM,subnet=default
--maintenance-policy=MIGRATE --provisioning-model=STANDARD
--service-account=1014222866085-compute@developer.gserviceaccount.com
--scopes=https://www.googleapis.com/auth/devstorage.read_only,https://www.googleapis.com/
auth/logging.write,https://www.googleapis.com/auth/monitoring.write,https://www.googleapis.c
om/auth/servicecontrol,https://www.googleapis.com/auth/service.management.readonly,https:/
/www.googleapis.com/auth/trace.append
--create-disk=auto-delete=yes,boot=yes,device-name=instance-1,image=projects/debian-cloud/gl
obal/images/debian-11-bullseye-v20221206,mode=rw,size=10,type=projects/palma-devops-iac/zo
nes/us-west4-b/diskTypes/pd-balanced --no-shielded-secure-boot --shielded-vtpm
--shielded-integrity-monitoring --reservation-affinity=any
```

Active Configuration Path: [/tmp/tmp.HmxXaQ9bQj/configurations/config_cloudshell-6751]

Account: [ffpalm@gmail.com]

Project: [palma-devops-iac]

Current Properties:

[accessibility]

screen_reader: [True] (property file)

[component_manager]

disable_update_check: [True] (property file)

[compute]

gce_metadata_read_timeout_sec: [30] (property file)

[core]

account: [ffpalm@gmail.com] (property file)

disable_usage_reporting: [True] (property file)

project: [palma-devops-iac] (property file)

[metrics]

environment: [devshell] (property file)

Logs Directory: [/tmp/tmp.HmxXaQ9bQj/logs]

Last Log File: [/tmp/tmp.HmxXaQ9bQj/logs/2022.12.16/13.51.44.606069.log]

git: [git version 2.30.2]

ssh: [OpenSSH_8.4p1 Debian-5+deb11u1, OpenSSL 1.1.1n 15 Mar 2022]

palma-devops-iac

Search Products, resources, docs (/)

4

Buckets

+


CREATE

↺

REFRESH

HELP ASSISTANT

LEARN



Preview The New Cloud Storage Monitoring Dashboard
Check out the new Cloud Storage monitoring dashboard and Bucket Observability pages! Powered by Cloud Operations, you can customize these dashboards for each project.
[TRY NOW](#)

×

Filter Filter buckets

Name

↑

Created

Location type

Location

Default storage class

Last modified

[palmapterraform](#)

Dec 17, 2022, 11:13:37 AM

Multi-region

us

Standard

Dec 17, 2022, 11:13:37 AM



CLOUD SHELL

Terminal

(palma-devops-iac) X + ▾

```
Welcome to Cloud Shell! Type "help" to get started.
Your Cloud Platform project in this session is set to palma-devops-iac.
Use "gcloud config set project [PROJECT_ID]" to change to a different project.
ffpalm@cloudshell:~ (palma-devops-iac) $ ls
cloud-build-samples  gopath  README-cloudshell.txt  terraform-hello
ffpalm@cloudshell:~ (palma-devops-iac) $ cd terraform-hello/terraform-gcp/
.git/
terraform-exemplo2/ terraform-hello/
ffpalm@cloudshell:~ (palma-devops-iac) $ cd terraform-hello/terraform-gcp/terraform-exemplo2/
ffpalm@cloudshell:~/terraform-hello/terraform-gcp/terraform-exemplo2 (palma-devops-iac) $ terraform init

Initializing the backend...

Error: Backend configuration changed

A change in the backend configuration has been detected, which may require migrating existing state.

If you wish to attempt automatic migration of the state, use "terraform init -migrate-state".
If you wish to store the current configuration with no changes to the state, use "terraform init -reconfigure".

ffpalm@cloudshell:~/terraform-hello/terraform-gcp/terraform-exemplo2 (palma-devops-iac) $ terraform init -reconfigure

Initializing the backend...

Successfully configured the backend "gcs"! Terraform will automatically
use this backend unless the backend configuration changes.

Initializing provider plugins...
- Reusing previous version of hashicorp/google from the dependency lock file
- Using previously-installed hashicorp/google v4.46.0

Terraform has been successfully initialized!

You may now begin working with Terraform. Try running "terraform plan" to see
any changes that are required for your infrastructure. All Terraform commands
should now work.

If you ever set or change modules or backend configuration for Terraform,
rerun this command to reinitialize your working directory. If you forget, other
commands will detect it and remind you to do so if necessary.
ffpalm@cloudshell:~/terraform-hello/terraform-gcp/terraform-exemplo2 (palma-devops-iac) $
```



CLOUD SHELL

Terminal

(palma-devops-iac) X + ▾

```
+ specific_reservation {
+   + key      = (known after apply)
+   + values   = (known after apply)
+ }
+ }

+ scheduling {
+   + automatic_restart           = (known after apply)
+   + instance_termination_action = (known after apply)
+   + min_node_cpus               = (known after apply)
+   + on_host_maintenance         = (known after apply)
+   + preemptible                 = (known after apply)
+   + provisioning_model          = (known after apply)

+   + node_affinities {
+     + key      = (known after apply)
+     + operator = (known after apply)
+     + values   = (known after apply)
+   }
+ }
+ }

# google_compute_network.vpc_network will be created
+ resource "google_compute_network" "vpc_network" {
+   + auto_create_subnetworks = true
+   + delete_default_routes_on_create = false
+   + gateway_ipv4             = (known after apply)
+   + id                       = (known after apply)
+   + internal_ipv6_range      = (known after apply)
+   + mtu                      = (known after apply)
+   + name                     = "terraform-network"
+   + project                  = (known after apply)
+   + routing_mode             = (known after apply)
+   + self_link                = (known after apply)
+ }
}
```

Plan: 2 to add, 0 to change, 0 to destroy.

Changes to Outputs:

```
+ ip = (known after apply)
```

Do you want to perform these actions?

Terraform will perform the actions described above.

Only 'yes' will be accepted to approve.

Enter a value: yes

```
terraform will perform the actions described above.
Only 'yes' will be accepted to approve.

Enter a value: yes











google_compute_network.vpc_network: Creating...
google_compute_network.vpc_network: Still creating... [10s elapsed]
google_compute_network.vpc_network: Still creating... [20s elapsed]
google_compute_network.vpc_network: Still creating... [30s elapsed]
google_compute_network.vpc_network: Still creating... [40s elapsed]
google_compute_network.vpc_network: Creation complete after 42s [id=projects/palma-devops-iac/global/networks/terraform-network]
google_compute_instance.vm_instance: Creating...
google_compute_instance.vm_instance: Still creating... [10s elapsed]
google_compute_instance.vm_instance: Creation complete after 13s [id=projects/palma-devops-iac/zones/us-central1-c/instances/clo
udbbuildterraform]

Apply complete! Resources: 2 added, 0 changed, 0 destroyed.

Outputs:

ip = "10.128.0.2"
ffpalm@cloudshell:~/terraform-hello/terraform-gcp/terraform-exemplo2 (palma-devops-iac)$
```


Notifications

	Delete VM instance "instance-1" palma-devops-iac	22 hours ago
	Enable service: run.googleapis.com palma-devops-iac	23 hours ago
	Enable service: appengine.googleapis.com palma-devops-iac	23 hours ago
	Enable service: cloudbuild.googleapis.com palma-devops-iac	23 hours ago
	Enable service: bigquery.googleapis.com palma-devops-iac	23 hours ago
	Enable service: compute.googleapis.com palma-devops-iac	23 hours ago
	Enable service: compute.googleapis.com palma-devops-iac	23 hours ago
	Delete VM instance "instance-1" gkebc	23 hours ago
	Delete VM instance "instance-1" gkebc	1 day ago
	Create VM instance "instance-1" and its boot disk "instance-1" gkebc	1 day ago

Cloud Storage

Buckets

Monitoring

Settings

Object details

HELP ASSISTANT

LEARN

Buckets

palmapterraform

terraform

state

default.tfstate

LIVE OBJECT

VERSION HISTORY

DOWNLOAD

EDIT METADATA

EDIT ACCESS

DELETE

Overview

Type	text/plain; charset=utf-8
Size	5.8 KB
Created	Dec 17, 2022, 11:20:01 AM
Last modified	Dec 17, 2022, 11:20:01 AM
Storage class	Standard
Custom time	—
Public URL	Not applicable
Authenticated URL	https://storage.cloud.google.com/palmapterraform/terraform/state/default.tfstate
gsutil URI	gs://palmapterraform/terraform/state/default.tfstate
Permissions	
Public access	Not public
Protection	
Hold status	None
Version history	—
Retention policy	None
Encryption type	Google-managed key

Marketplace

Release Notes

```
ip = "10.128.0.2"
ffpalm@cloudshell:~/terraform-hello/terraform-gcp/terraform-exemplo2 (palma-devops-iac)$ terraform plan
google_compute_network.vpc_network: Refreshing state... [id=projects/palma-devops-iac/global/networks/terraform-network]
google_compute_instance.vm_instance: Refreshing state... [id=projects/palma-devops-iac/zones/us-central1-c/instances/cloudbuildterraform]

No changes. Your infrastructure matches the configuration.

Terraform has compared your real infrastructure against your configuration and found no differences, so no changes are needed.
ffpalm@cloudshell:~/terraform-hello/terraform-gcp/terraform-exemplo2 (palma-devops-iac)$
```

VM instances

CREATE INSTANCE

IMPORT VM

REFRESH

START / RESUME

STOP

OPERATION

INSTANCES

INSTANCE SCHEDULES

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



Filter

Enter property name or value

	Status	Name ↑	Zone	Recommendations	In use by	Internal IP	External IP	Connect
<input type="checkbox"/>	✓	cloudbuildterraform	us-central1-c			10.128.0.2 (nic0)	130.211.232.118 (nic0)	SSH ▾ ⋮

VPC networks

 **Filter** Enter property name or value

Name 	Subnets	MTU 	Mode
default	36	1460	Auto
terraform-network	35	1460	Auto

Cloud build


Triggers

[+ CREATE TRIGGER](#)

[CONNECT REPOSITORY](#)








[LEARN](#)

Region
global (non-regional) 


 **Filter** Enter property name or value





Name 	Description	Repository	Event	Build configuration	
desafioterraform	-	 fabiofpalma/desafioterraform 	Push to branch	Autodetected	RUN 


 **Cloud Build**


[← Build details](#) [REBUILD](#) [COPY URL](#) [LEARN](#)


 Dashboard


 **History**

 Triggers

 Settings







 Release Notes



 **Successful: 64373f2a**

Started on Dec 17, 2022, 12:35:48 PM

Source
[gs://palma-devops-iac_cloudbuild/source/1671291337.077285-179df13b3bb941f9b8ecc91be291facf.tgz](#)

Steps	Duration	BUILD LOG	EXECUTION DETAILS	BUILD ARTIFACTS
 Build Summ... 1 Step	00:00:20	<input type="checkbox"/> Wrap lines <input type="checkbox"/> Show newest entries first	   EXPAND	VIEW RAW 
 0: tf apply sh -c terrafor...	00:00:07	<pre>1 starting build "64373f2a-4575-4071-b524-199c757f27e8" 2 3 FETCHSOURCE 4 Fetching storage object: gs://palma-devops-iac_cloudbuild/source/1671291337.077285-179df13b3bb941f9b8ecc91be291facf.tgz 5 Copying gs://palma-devops-iac_cloudbuild/source/1671291337.077285-179df13b3bb941f9b8ecc91be291facf.tgz to /tmp 6 / [0 files][0.0 B/ 18.1 MiB] 7 / [1 files][18.1 MiB/ 18.1 MiB] 8 Operation completed over 1 objects/18.1 MiB. 9 BUILD 10 Pulling image: hashicorp/terraform:1.0.0 11 1.0.0: Pulling from hashicorp/terraform 12 540db60ca938: Pulling fs layer 13 a84ab4c8a000: Pulling fs layer</pre>		

```
ffpalm@cloudshell:~/.../terraform-gcp/terraform-exemplo2 (palma-devops-iac)$ gcloud build
s submit --config cloudbuild.yaml
Creating temporary tarball archive of 7 file(s) totalling 64.7 MiB before compression.
Uploading tarball of [...] to [gs://palma-devops-iac_cloudbuild/source/1671290603.173312-93
0e8e89bdfc4b99befda81f2d550fc8.tgz]
Created [https://cloudbuild.googleapis.com/v1/projects/palma-devops-iac/locations/global/
builds/3e1ec927-334e-4598-9a58-50fbb36cc105].
Logs are available at [ https://console.cloud.google.com/cloud-build/builds/3e1ec927-334e
-4598-9a58-50fbb36cc105?project=1014222866085 ].
----- REMOTE BUILD OUTPUT -----
starting build "3e1ec927-334e-4598-9a58-50fbb36cc105"

FETCHSOURCE
Fetching storage object: gs://palma-devops-iac_cloudbuild/source/1671290603.173312-930e8e
89bdfc4b99befda81f2d550fc8.tgz#1671290614979806
```

```
5 | entrypoint: 'sh'

Problems Output palma-devops-iac X

google_compute_network.vpc_network: Refreshing state... [id=projects/palma-devops-iac/glo
bal/networks/terraform-network]
google_compute_instance.vm_instance: Refreshing state... [id=projects/palma-devops-iac/zo
nes/us-central1-c/instances/cloudbuildterraform]

No changes. Your infrastructure matches the configuration.

Terraform has compared your real infrastructure against your configuration
and found no differences, so no changes are needed.

Apply complete! Resources: 0 added, 0 changed, 0 destroyed.

Outputs:

ip = "10.128.0.2"
PUSH
DONE

-----
ID: 3e1ec927-334e-4598-9a58-50fbb36cc105
CREATE_TIME: 2022-12-17T15:23:35+00:00
DURATION: 23S
SOURCE: gs://palma-devops-iac_cloudbuild/source/1671290603.173312-930e8e89bdfc4b99befda81
f2d550fc8.tgz
IMAGES: -
STATUS: SUCCESS
ffpalm@cloudshell:~/.../terraform-gcp/terraform-exemplo2 (palma-devops-iac)$
```

Cloud Build

Dashboard

History

Triggers

Settings

Release Notes

<|

Settings

SERVICE ACCOUNT

WORKER POOL

Service account permissions

Cloud Build executes builds with the permissions granted to the [Cloud Build service account](#) tied to the project. You can grant additional roles to the service account to allow Cloud Build to interact with other GCP services.

Service account email: 1014222866085@cloudbuild.gserviceaccount.com

GCP Service	Role ?	Status
Cloud Functions	Cloud Functions Developer	DISABLED ▼
Cloud Run	Cloud Run Admin	ENABLED ▼
App Engine	App Engine Admin	ENABLED ▼
Kubernetes Engine	Kubernetes Engine Developer	DISABLED ▼
Compute Engine	Compute Instance Admin (v1)	ENABLED ▼
Firebase	Firebase Admin	DISABLED ▼
Cloud KMS	Cloud KMS CryptoKey Decrypter	DISABLED ▼

Códigos

EXPLORER

OPEN EDITORS

FFPALM

cloud-build-sam

gopath

terraform-hello

terraform-gcp

terraform-exeml

cloud-console-

cloudbuild.yan

main.tf

outputs.tf

variables.tf

terraform-hello

instance.tf

terraform.tfsta

terraform.tfsta

README.md

instance.tf

terraform.tfstate

terraform.tfstate.l

README-cloudsh

main.tf

terraform-hello > terraform-gcp > terraform-exemplo2 > main.tf > ...

```
1 terraform {
2   required_providers {
3     google = {
4       source = "hashicorp/google"
5     }
6   }
7
8   backend "gcs" {
9     bucket = "palmapterraform"
10    prefix = "terraform/state"
11  }
12
13 }
14
15 provider "google" {
16   project = "palma-devops-iac"
17   region  = "us-central1"
18   zone    = "us-central1-c"
19 }
20
21 resource "google_compute_network" "vpc_network" {
22   name = "${var.network_name}"
23 }
24
25 resource "google_compute_instance" "vm_instance" {
26   name          = "cloudbbbuildterraform"
27   machine_type  = "f1-micro"
28   tags          = ["prod"]
29
30   labels = {
31     centro_custo = "${var.centro_custo_rh}"
```

```
27 machine_type = f1-micro
28 tags = ["prod"]
29
30 labels = {
31     centro_custo = "${var.centro_custo_rh}"
32 }
33
34 boot_disk {
35     initialize_params {
36         image = "debian-cloud/debian-11"
37     }
38 }
39 network_interface {
40     network = google_compute_network.vpc_network.name
41     access_config {
42     }
43 }
44 }
```