

Documentation for Deploying a Google Compute Engine Instance Using Terraform

1. Introduction

This document outlines the detailed steps and approaches used to deploy a Google Compute Engine (GCE) instance on Google Cloud Platform (GCP) using Terraform. The deployment includes setting up the necessary permissions, creating configuration files, and executing Terraform commands to manage the infrastructure.

2. Prerequisites

Before starting, ensure you have the following:

- A Google Cloud Platform account.
- Terraform installed on your local machine.
- Google Cloud SDK installed and configured.
- A service account with the required permissions.

3. Setting Up the Service Account

1. **Create a Service Account:**
 - Go to the Google Cloud Console.
 - Create a new service account with the necessary permissions for managing Compute Engine resources. For this guide, we'll use the `Compute Admin` role.
2. **Generate and Download the Service Account Key:**
 - Generate a JSON key for the service account and download it. Save this key file securely as it will be used by Terraform to authenticate with GCP.

4. Terraform Configuration Files

Create a Terraform Configuration Directory:

1. Open a terminal and navigate to the directory where you want to store your Terraform configuration files.
2. Create a new directory for your Terraform project: `mkdir my-terraform-project` `cd my-terraform-project`

Create `main.tf` Configuration File:

1. Open a text editor and create a file named `main.tf`.
2. Add the following content to configure a Google Compute Engine instance:


```
provider "google" {
  credentials = file("<YOUR_SERVICE_ACCOUNT_JSON_PATH>")
  project     = "sit374-435105"
  region      = "australia-southeast1"
}

resource "google_compute_instance" "default" {
  name          = "my-instance"
  machine_type  = "e2-medium"
  zone          = "australia-southeast1-b"

  boot_disk {
    initialize_params {
      image = "debian-cloud/debian-11-bullseye-v20240815"
      size  = 10
      type  = "pd-standard"
    }
  }
}

network_interface {
  network = "default"

  access_config {
    // Include this section to assign an external IP address
  }
}
}
```



Create `variables.tf` Configuration File (Optional):

1. In the same directory, create a file named `variables.tf`.
2. Add the following content to define any variables you might want to use:

```
variable "credentials_file_path" {
  description = "Path to the Google Cloud service account key file."
  type        = string
}

variable "project_id" {
  description = "Google Cloud project ID."
  type        = string
}
```

Create `terraform.tfvars` Configuration File (Optional):

1. In the same directory, create a file named `terraform.tfvars`.
2. Add the following content to specify the values for the variables:

```
credentials_file_path = "/path/to/your/service_account_key.json"
project_id            = "sit374-435105"
```

4.3. Apply the Configuration

Apply the configuration to create the resources. Terraform will prompt for confirmation before making any changes.

```
terraform apply
```

Confirmation Prompt:

```
Terraform will perform the following actions:

# google_compute_instance.default will be created
...

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

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

Enter a value: yes
```

Expected Output:

```
google_compute_instance.default: Creating...
google_compute_instance.default: Still creating... [10s elapsed]
google_compute_instance.default: Creation complete after 30s [id=projects/sit374-4

Apply complete! Resources: 1 added, 0 changed, 0 destroyed.

Outputs:

instance_self_link = "https://www.googleapis.com/compute/v1/projects/sit374-435105"
```

5. Cleaning Up Resources

If you want to delete the resources created, you can use the following command:

```
terraform destroy
```

Conclusion

In this document, we have covered the entire process of setting up a Google Cloud VM instance using Terraform, from setting up the environment and service account to writing the configuration files, applying them, and verifying the deployment. Following these steps ensures that your infrastructure is reproducible and managed as code, which is a best practice in modern cloud environments.

MY DEPLOYING PROCESS SCREENSHOTS:

```
Your current Google Cloud CLI version is: 491.0.0
The latest available version is: 491.0.0
```

```

# Run 'gcloud --help' to see the GCP Platform services you can interact with. And run 'gcloud help COMMAND' to get help on any gcloud command.
# Run 'gcloud topic --help' to learn about advanced features of the CLI like arg files and output formatting
# Run 'gcloud cheat-sheet' to see a roste. go-to 'gcloud' commands.
(base) granabakhtiarial@192-168-1-105 ~ %

```

```
##### 100.0%
-- Downloading https://dl.google.com/dl/cloudsdk/channels/rapid/downloads/google-cloud-cli-491.0.0-darwin-arm.tar.gz
##### 100.0%
All dependencies satisfied.
-- Installing Cask google-cloud-sdk
Running installer script 'google-cloud-sdk/install.sh'
Welcome to the Google Cloud CLI!

Your current Google Cloud CLI version is: 491.0.0
The latest available version is: 491.0.0
```

Components			
Status	Name	ID	Size
Not Installed	App Engine Go Extensions	app-engine-go	4.5 MiB
Not Installed	Appctl	appctl	18.5 MiB
Not Installed	Artifact Registry Go Module Package Helper	package-go-module	< 1 MiB
Not Installed	Cloud Bigtable Command Line Tool	cbt	17.9 MiB
Not Installed	Cloud Bigtable Emulator	bigtable	7.0 MiB
Not Installed	Cloud Datastore Emulator	cloud-datastore-emulator	36.2 MiB
Not Installed	Cloud Firestore Emulator	cloud-firestore-emulator	46.3 MiB
Not Installed	Cloud Pub/Sub Emulator	pubsub-emulator	63.7 MiB
Not Installed	Cloud Run Proxy	cloud-run-proxy	11.3 MiB
Not Installed	Cloud SDK Proxy v2	cloud-sdl-proxy	15.2 MiB
Not Installed	Google Container Registry's Docker credential helper	docker-credential-gcr	
Not Installed	Kustomize	kustomize	7.4 MiB
Not Installed	Log Streaming	log-streaming	11.9 MiB
Not Installed	Minikube	minikube	34.8 MiB
Not Installed	Nomos CLI	nomos	31.3 MiB
Not Installed	On-Demand Scanning API extraction helper	local-extract	19.9 MiB
Not Installed	Scaffold	scaffold	22.9 MiB
Not Installed	Terraform Tools	terraform-tools	43.6 MiB
Not Installed	Anthos Auth	anthos-auth	28.9 MiB
Not Installed	Config Connector	config-connector	88.7 MiB
Not Installed	Enterprise Certificate Proxy	enterprise-certificate-proxy	8.3 MiB
Not Installed	gcloud Alpha Commands	alpha	< 1 MiB
Not Installed	gcloud Beta Commands	beta	< 1 MiB
Not Installed	gcloud app Java Extensions	app-engine-java	127.0 MiB
Not Installed	gcloud app Python Extensions	app-engine-python	5.0 MiB
Not Installed	gcloud app Python Extensions (Extra Libraries)	app-engine-python-extras	< 1 MiB
Not Installed	gke-gcloud-auth-plugin	gke-gcloud-auth-plugin	4.0 MiB
Not Installed	Istioctl	istioctl	24.0 MiB
Not Installed	k8s	k8s	14.4 MiB
Not Installed	Kubect1	kubect1	< 1 MiB
Not Installed	kubect1-oidc	kubect1-oidc	28.9 MiB
Not Installed	pkg	pkg	
Installed	Bighquery Command Line Tool	bq	1.7 MiB
Installed	Cloud Storage Command Line Tool	gsutil	11.3 MiB
Installed	Google Cloud CLI Core Libraries	core	19.6 MiB
Installed	Google Cloud CRC32C Hash Tool	gcloud-crc32c	1.2 MiB

For more information on how to get started, please visit:
<https://cloud.google.com/sdk/docs/quickstarts>

To install or remove components at your current SDK version (491.0.0), run:
\$ gcloud components install COMPONENT_ID
\$ gcloud components remove COMPONENT_ID

To update your SDK installation to the latest version (491.0.0), run:
\$ gcloud components update

```
--> Source [/opt/homebrew/share/google-cloud-sdk/completion.zsh.inc] in your profile to enable shell command completion for gcloud.
--> Source [/opt/homebrew/share/google-cloud-sdk/path.zsh.inc] in your profile to add the Google Cloud SDK command line tools to your $PATH.
--> Linking Binary 'gcloud' to '/opt/homebrew/bin/gcloud'
--> Linking Binary 'git-credential-gcloud.sh' to '/opt/homebrew/bin/git-credential-gcloud'
--> Linking Binary 'gcp' to '/opt/homebrew/bin/gcp'
--> Linking Binary 'completion.zsh.inc' to '/opt/homebrew/share/zsh/site-functions/_google_cloud_sdk'
--> Linking Binary 'completion.bash.inc' to '/opt/homebrew/etc/bash_completion.d/google-cloud-sdk'
--> Linking Binary 'bc' to '/opt/homebrew/bin/bc'
--> Linking Binary 'docker-credential-gcloud' to '/opt/homebrew/bin/docker-credential-gcloud'
👉 Google Cloud SDK was successfully installed!
(base) armanbakhitiriasl@192-168-1-105 ~ %
```

```
[3] us-east1-d
[4] us-west1-c
[5] us-west1-b
[6] us-east1-e
[7] us-central1-c
[8] us-central1-a
[9] us-central1-f
[10] us-central1-b
[11] us-west1-b
[12] us-west1-c
[13] us-west1-e
[14] europe-west1-a
[15] europe-west1-b
[16] europe-west1-c
[17] europe-west1-b
[18] europe-west1-d
[19] europe-west1-c
[20] europe-west1-c
[21] europe-west1-a
[22] europe-west1-b
[23] europe-west2-c
[24] europe-west2-b
[25] europe-west2-e
[26] asia-east1-b
[27] asia-east1-a
[28] asia-east1-c
[29] asia-southeast1-b
[30] asia-southeast1-a
[31] asia-southeast1-c
[32] asia-northeast1-b
[33] asia-northeast1-c
[34] asia-northeast1-a
[35] asia-south1-c
[36] asia-south1-b
[37] asia-south1-a
[38] australia-southeast1-b
[39] australia-southeast1-c
[40] australia-southeast1-a
[41] southamerica-east1-b
[42] southamerica-east1-c
[43] southamerica-east1-a
[44] africa-south1-a
[45] africa-south1-b
[46] africa-south1-c
[47] asia-east2-a
[48] asia-east2-b
[49] asia-east2-c
[50] asia-northeast2-a
Did not print [72] options.
Too many options [122]. Enter 'list' at prompt to print choices fully.
Please enter numeric choice or text value (must exactly match list item): 38
Your project default Compute Engine zone has been set to [australia-southeast1-b].
You can change it by running [gcloud config set compute/zone NAME].

Your project default Compute Engine region has been set to [australia-southeast1].
You can change it by running [gcloud config set compute/region NAME].

The Google Cloud CLI is configured and ready to use!

• Commands that require authentication will use arman.bakhitir@gmail.com by default
• Commands will reference project 'sit374-435105' by default
• Compute Engine commands will use region 'australia-southeast1' by default
• Compute Engine commands will use zone 'australia-southeast1-b' by default

Run 'gcloud help config' to learn how to change individual settings

This gcloud configuration is called [default]. You can create additional configurations if you work with multiple accounts and/or projects.
Run 'gcloud topic configurations' to learn more.

Some things to try next:

• Run 'gcloud --help' to see the Cloud Platform services you can interact with. And run 'gcloud help COMMAND' to get help on any gcloud command.
• Run 'gcloud topic --help' to learn about advanced features of the CLI like arg files and output formatting
• Run 'gcloud cheat-sheet' to see a roster of go-to 'gcloud' commands.
(base) armanbakhitiriasl@192-168-1-105 ~ %
```

```
(base) armanbakhtiariasl@192-168-1-105 ~ % gcloud config list

[compute]
region = australia-southeast1
zone = australia-southeast1-b
[core]
account = rman.bakhtiari@gmail.com
disable_usage_reporting = True
project = sit374-435105

Your active configuration is: [default]
(base) armanbakhtiariasl@192-168-1-105 ~ %
```

SIT374

Search (/) for resources, docs, products, and more

capstoneproject

DETAILSPERMISSIONSKEYSMETRICSLOGS

Keys

Service account keys could pose a security risk if compromised. We recommend you avoid downloading service account keys and instead use the [service accounts on Google Cloud](#).

Google automatically disables service account keys detected in public repositories. You can customize this behavior by using the `iam.serviceAcc`

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	Creation date	Expiration date	
	Active	6f927a03516891c0ca4a03e2dfa0e98639b61b6f	Sep 9, 2024	Jan 1, 10000	

SIT374

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A

Service accounts

+ CREATE SERVICE ACCOUNTDELETEMANAGE ACCESSREFRESHLEARN

Service accounts for project "SIT374"

A service account represents a Google Cloud service identity, such as code running on Compute Engine VMs, App Engine apps, or systems running outside Google. [Learn more about service accounts.](#)

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

Filter

Enter property name or value

	Email	Status	Name	Description	Key ID	Key creation date	OAuth 2 Client ID	Actions
<input type="checkbox"/>	capstoneproject@sit374-435105.iam.gserviceaccount.com	Enabled	capstoneproject		No keys		106870890420548419881	


```
(base) armanbakhtiariasl@192-168-1-105 ~ % export GOOGLE_CLOUD_KEYFILE_JSON=/Users/armanbakhtiariasl/Downloads
(base) armanbakhtiariasl@192-168-1-105 ~ % echo $GOOGLE_CLOUD_KEYFILE_JSON
/Users/armanbakhtiariasl/Downloads
(base) armanbakhtiariasl@192-168-1-105 ~ % █
```

```
(base) armanbakhtiariasl@192-168-1-105 ~ % brew tap hashicorp/tap
brew install hashicorp/tap/terraform
  Auto-updating Homebrew...
Adjust how often this is run with HOMEBREW_AUTO_UPDATE_SECS or disable with
HOMEBREW_NO_AUTO_UPDATE. Hide these hints with HOMEBREW_NO_ENV_HINTS (see 'man brew').
terraform 1.9.4 is already installed but outdated (so it will be upgraded).
--> Fetching hashicorp/tap/terraform
  Downloading https://releases.hashicorp.com/terraform/1.9.5/terraform_1.9.5_darwin_arm64.zip
##### 100.0%
--> Upgrading hashicorp/tap/terraform
1.9.4 -> 1.9.5
  /opt/homebrew/Cellar/terraform/1.9.5: 5 files, 83.9MB, built in 1 second
  Running 'brew cleanup terraform'...
Disable this behaviour by setting HOMEBREW_NO_INSTALL_CLEANUP.
Hide these hints with HOMEBREW_NO_ENV_HINTS (see 'man brew').
Removing: /opt/homebrew/Cellar/terraform/1.9.4... (5 files, 83.9MB)
Removing: /usr/local/bakhtiariasl/Library/Caches/Homebrew/terraform--1.9.4.zip... (24.9MB)
(base) armanbakhtiariasl@192-168-1-105 ~ % brew install terraform
Error: terraform 1.9.5 is already installed
To install 1.5.7, first run:
  brew unlink terraform
(base) armanbakhtiariasl@192-168-1-105 ~ % terraform --version
Terraform v1.9.5
on darwin_arm64
(base) armanbakhtiariasl@192-168-1-105 ~ % █
```

```
(base) armanbakhtiariasl@192-168-1-105 my-terraform-project % nano main.tf
(base) armanbakhtiariasl@192-168-1-105 my-terraform-project % nano main.tf
(base) armanbakhtiariasl@192-168-1-105 my-terraform-project % nano variables.tf
(base) armanbakhtiariasl@192-168-1-105 my-terraform-project % terraform init
```

```
Initializing the backend...
Initializing provider plugins...
- Finding latest version of hashicorp/google...
- Installing hashicorp/google v6.1.0...
- Installed hashicorp/google v6.1.0 (signed by HashiCorp)
Terraform has created a lock file .terraform.lock.hcl to record the provider
selections it made above. Include this file in your version control repository
so that Terraform can guarantee to make the same selections by default when
you run "terraform init" in the future.
```

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.

```
(base) armanbakhtiariasl@192-168-1-105 my-terraform-project % █
```

```
(base) armanbakhtiarisl@192-168-1-105 my-terraform-project % terraform.tfvars
(base) armanbakhtiarisl@192-168-1-105 my-terraform-project % terraform plan

Terraform used the selected providers to generate the following execution plan. Resource actions are indicated with the following symbols:
+ create

Terraform will perform the following actions:

# google_compute_instance.default will be created
resource "google_compute_instance" "default" {
+ can_ip_forward      = false
+ cpu_platform        = (known after apply)
+ current_status      = (known after apply)
+ deletion_protection = false
+ effective_labels     = {}
+ "goog-terraform-provisioned" = "true"
}
+ id                  = (known after apply)
+ instance_id         = (known after apply)
+ label_fingerprint   = (known after apply)
+ machine_type        = "e2-medium"
+ metadata_fingerprint = (known after apply)
+ min_cpu_platform    = (known after apply)
+ name                = "my-instance"
+ project             = "sit374-435185"
+ self_link            = (known after apply)
+ tags_fingerprint    = (known after apply)
+ terraform_labels    = {}
+ "goog-terraform-provisioned" = "true"
}
+ zone                = "australia-southeast1-b"

+ boot_disk {
+ auto_delete      = true
+ device_name      = (known after apply)
+ disk_encryption_key_sha256 = (known after apply)
+ kms_key_self_link = (known after apply)
+ mode             = "READ_WRITE"
+ source           = (known after apply)

+ initialize_params {
+ image      = "debian-cloud/debian-11-buster-v20210817"
+ labels     = (known after apply)
+ provisioned_laps = (known after apply)
+ provisioned_throughput = (known after apply)
+ size       = (known after apply)
+ type       = (known after apply)
}
}

+ confidential_instance_config (known after apply)

+ guest_accelerator (known after apply)

+ network_interface {
+ internal_ipv6_prefix_length = (known after apply)
+ ipv6_access_type           = (known after apply)
+ ipv6_address               = (known after apply)
+ name                       = (known after apply)
+ network                    = "default"
+ network_ip                 = (known after apply)
+ stack_type                 = (known after apply)
+ subnetwork                 = (known after apply)
+ subnetwork_project         = (known after apply)

+ access_config {
+ nat_ip      = (known after apply)
+ network_tier = (known after apply)
}
}

+ reservation_affinity (known after apply)

+ scheduling (known after apply)

}

+ tags = {
+ "goog-terraform-provisioned",
}
+ tags_fingerprint = (known after apply)
+ terraform_labels = {}
+ "goog-terraform-provisioned" = "true"
}
+ zone                = "australia-southeast1-b"

+ boot_disk {
+ auto_delete      = true
+ device_name      = (known after apply)
+ disk_encryption_key_sha256 = (known after apply)
+ kms_key_self_link = (known after apply)
+ mode             = "READ_WRITE"
+ source           = (known after apply)

+ initialize_params {
+ image      = "debian-cloud/debian-11-bullseye-v20240815"
+ labels     = (known after apply)
+ provisioned_laps = (known after apply)
+ provisioned_throughput = (known after apply)
+ size       = 10
+ type       = "pd-standard"
}
}

+ confidential_instance_config (known after apply)

+ guest_accelerator (known after apply)

+ network_interface {
+ internal_ipv6_prefix_length = (known after apply)
+ ipv6_access_type           = (known after apply)
+ ipv6_address               = (known after apply)
+ name                       = (known after apply)
+ network                    = "default"
+ network_ip                 = (known after apply)
+ stack_type                 = (known after apply)
+ subnetwork                 = (known after apply)
+ subnetwork_project         = (known after apply)

+ access_config {
+ nat_ip      = (known after apply)
+ network_tier = (known after apply)
}
}

+ reservation_affinity (known after apply)

+ scheduling (known after apply)

}

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

Changes to Outputs:
+ instance_name      = "my-instance" -> null
+ instance_self_link = (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
google_compute_instance.default: Creating...
google_compute_instance.default: Still creating... [10s elapsed]
google_compute_instance.default: Still creating... [20s elapsed]
google_compute_instance.default: Creation complete after 30s [id=projects/sit374-435185/zones/australia-southeast1-b/instances/my-instance]

Apply complete! Resources: 1 added, 0 changed, 0 destroyed.

Outputs:
instance_self_link = "https://www.googleapis.com/compute/v1/projects/sit374-435185/zones/australia-southeast1-b/instances/my-instance"
(base) armanbakhtiarisl@192-168-1-105 my-terraform-project %
```

```
OnTrack x DeakinSync | Home x Mail - ARMAN BAKHTIARIAS x ChatGPT x capstoneproject - IAM & Ad... x www.googleapis.com/compute... x +
www.googleapis.com/compute/v1/projects/sit374-435105/zones/australia-southeast1-b/instances/my-instance
Pretty print
{
  "error": {
    "code": 401,
    "message": "Request is missing required authentication credential. Expected OAuth 2 access token, login cookie or other valid authentication credential. See https://developers.google.com/identity/sign-in/web/devconsole-project.",
    "errors": [
      {
        "message": "Login Required.",
        "domain": "global",
        "reason": "required",
        "location": "Authorization",
        "locationType": "header"
      }
    ],
    "status": "UNAUTHENTICATED",
    "details": [
      {
        "@type": "type.googleapis.com/google.rpc.ErrorInfo",
        "reason": "CREDENTIALS_MISSING",
        "domain": "googleapis.com",
        "metadata": {
          "method": "compute.v1.instancesService.Get",
          "service": "compute.googleapis.com"
        }
      }
    ]
  }
}

(base) armanbakhtiaris1@192-168-1-105 my-terraform-project % gcloud compute instances list
NAME                                ZONE                                MACHINE_TYPE  PREEMPTIBLE  INTERNAL_IP  EXTERNAL_IP  STATUS
my-instance  australia-southeast1-b  e2-medium    10.152.0.2   35.189.34.158  RUNNING
(base) armanbakhtiaris1@192-168-1-105 my-terraform-project % gcloud compute ssh my-instance --zone australia-southeast1-b
WARNING: The private SSH key file for gcloud does not exist.
WARNING: The public SSH key file for gcloud does not exist.
WARNING: You do not have an SSH key for gcloud.
WARNING: SSH keygen will be executed to generate a key.
Generating public/private rsa key pair.
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in /Users/armanbakhtiaris1/.ssh/google_compute_engine
Your public key has been saved in /Users/armanbakhtiaris1/.ssh/google_compute_engine.pub
The key fingerprint is:
SHA256:mgXyQBNSAFv0KZpAnST8PBm2K8VnQ5Burf2IZVip9U armanbakhtiaris1@192-168-1-105.tpgi.com.au
The key's randomart image is:
+--[RSA 3072]-----
|  o  ==C=Oo  ...+o|
| ...OXWo  ...+E|
| o * #.  . . o |
| = O.o.  . . |
| . + . S.  . |
| o  +  .  . |
| . o  .  .  |
+-----[SHA256]-----
Updating project ssh metadata...Updated [https://www.googleapis.com/compute/v1/projects/sit374-435105].
Updating project ssh metadata...done.
Waiting for SSH key to propagate.
Warning: Permanently added 'compute-08a997823679063938a' (6025619) to the list of known hosts.
Linux my-instance 5.10.0-32-cloud-amd64 #1 SMP Debian 5.10.223-1 (2024-08-10) x86_64

The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.
Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
armanbakhtiaris1@my-instance: $
```

```

boot_disk {
  auto_delete      = true -> null
  device_name      = "persistent-disk-0" -> null
  mode            = "READ_WRITE" -> null
  source           = "https://www.googleapis.com/compute/v1/projects/sit374-435186/zones/australia-southeast1-b/disks/my-instance" -> null
  # (5 unchanged attributes hidden)

  initialize_params {
    - enable_confidential_compute = false -> null
    - image                      = "https://www.googleapis.com/compute/v1/projects/debian-cloud/global/images/debian-11-bullseye-v20240815" -> null
    - labels                    = {} -> null
    - provisioned_laps         = 0 -> null
    - provisioned_throughput   = 0 -> null
    - resource_manager_tags    = {} -> null
    - size                     = 10 -> null
    - type                    = "pd-standard" -> null
    # (1 unchanged attribute hidden)
  }
}

network_interface {
  internal_ipv6_prefix_length = 0 -> null
  name                      = "nic0" -> null
  network                   = "https://www.googleapis.com/compute/v1/projects/sit374-435186/global/networks/default" -> null
  network_ip                = "10.152.0.2" -> null
  queue_count               = 0 -> null
  stack_type                = "IPV4_ONLY" -> null
  subnetwork                = "https://www.googleapis.com/compute/v1/projects/sit374-435186/regions/australia-southeast1/subnetworks/default" -> null
  subnetwork_project        = "sit374-435186" -> null
  # (3 unchanged attributes hidden)

  access_config {
    - nat_ip                = "35.189.34.158" -> null
    - network_tier          = "PREMIUM" -> null
    # (1 unchanged attribute hidden)
  }
}

scheduling {
  automatic_restart      = true -> null
  min_node_cpu           = 0 -> null
  on_host_maintenance    = "MIGRATE" -> null
  preemptible            = false -> null
  provisioning_model     = "STANDARD" -> null
  # (2 unchanged attributes hidden)
}

shield_instance_config {
  enable_integrity_monitoring = true -> null
  enable_secure_boot         = false -> null
  enable_vtpm                = true -> null
}
}

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

Changes to Outputs:
- instance_self_link = "https://www.googleapis.com/compute/v1/projects/sit374-435186/zones/australia-southeast1-b/instances/my-instance" -> null

Do you really want to destroy all resources?
Terraform will destroy all your managed infrastructure, as shown above.
There is no undo. Only 'yes' will be accepted to confirm.

Enter a value: yes

google_compute_instance.default: Destroying... [id=projects/sit374-435186/zones/australia-southeast1-b/instances/my-instance]
google_compute_instance.default: Still destroying... [id=projects/sit374-435186/zones/australia-southeast1-b/instances/my-instance, 10s elapsed]
google_compute_instance.default: Still destroying... [id=projects/sit374-435186/zones/australia-southeast1-b/instances/my-instance, 20s elapsed]
google_compute_instance.default: Still destroying... [id=projects/sit374-435186/zones/australia-southeast1-b/instances/my-instance, 30s elapsed]
google_compute_instance.default: Still destroying... [id=projects/sit374-435186/zones/australia-southeast1-b/instances/my-instance, 40s elapsed]
google_compute_instance.default: Still destroying... [id=projects/sit374-435186/zones/australia-southeast1-b/instances/my-instance, 50s elapsed]
google_compute_instance.default: Destruction complete after 50s

Destroy complete! Resources: 1 destroyed.
(base) armanbakhtiarisl@292-168-1-185 my-terraform-project N

```

This document is provided by 70% Arman Bakhtiarisl and 30% Thamasha Galahahena