Deploy Umbrella Virtual Appliances in GCP with Terraform

Contents

Introduction

This document describes how to deploy the Cisco Umbrella Virtual Appliances in GCP with Terraform.

Prerequisites

Requirements

Cisco recommends that you have knowledge of these topics:

- Cisco Umbrella Virtual Appliance
- Google Cloud Platform (GCP)
- Terraform

Components Used

This document is not restricted to specific software and hardware versions.

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, ensure that you understand the potential impact of any command.

Configure

Here are the steps to deploy Cisco Umbrella Virtual Appliance (VA) in GCP with the use of

Terraform:

Step 1: Create the Cisco Umbrella Virtual Appliance Template in GCP

Before the resources are applied, you need to create the Umbrella Virtual Appliance Template in GCP. To create the Umbrella Virtual Appliance Template, see [Deploy VAs in Google Cloud Platform.](#)

Then ensure that the environment variables are defined in the **variables.tf** file.

Step 2: Update the variables in variables.tf file

Update the variables in variable.tf file:

```
variable "gcp-project-name" { description = "Name of the GCP Project" default = "my-project" }
variable "gcp-region" { description = "GCP Region" default = "us-east4" } variable "gcp-zone" {
description = "GCP Zone" default = "us-east4-a" }
```

Step 3: Define a GCP network

Define a GCP network to attach the Umbrella VA instances:

```
# Create Network resource "google_compute_network" "vpc_network" { name = "gcp-network"
auto_create_subnetworks = "true" }
```

Step 4: Fetch the Umbrella VA Template

Fetch the Umbrella VA Template that was created in Step 1:

```
data "google_compute_instance_template" "umb_va_temp" { project = var.gcp-project-name name =
"umbrella-va-instance-template" }
```

Step 5: Create Instance A From Umbrella VA Template and Attach to Network

Create an instance called 'Instance A' from the Umbrella VA template, which is attached to the network:

```
resource "google_compute_instance_from_template" "umb_va_a" { name = "umb-va-a" zone = var.gcp-
zone source_instance_template = data.google_compute_instance_template.umb_va_temp.id
network_interface { # A default network is created for all GCP projects network =
google_compute_network.vpc_network.self_link access_config { } } }
```

Step 6: Create Instance B from Umbrella VA Template and Attach to Network

Create an instance called 'Instance B' from the Umbrella VA template, which is attached to the network:

```
resource "google_compute_instance_from_template" "umb_va_b" { name = "umb-va-b" zone = var.gcp-
zone source_instance_template = data.google_compute_instance_template.umb_va_temp.id
```

```
network_interface { # A default network is created for all GCP projects network =
google_compute_network.vpc_network.self_link access_config { } } }
```

Verify

Verify that Umbrella Virtual Appliances are discovered in Umbrella portal under **Deployments > Configurations > Sites and Active Directory.** Discovery takes about 10-15 minutes. Here is an example of Virtual Appliances that were discovered in Cisco Umbrella portal: