

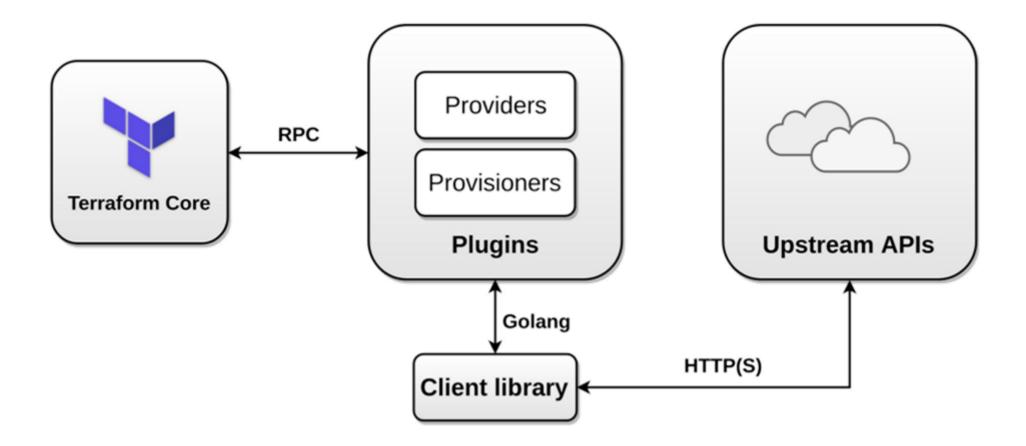
AWS Solutions Architect Associate

Session 701

Terraform for AWS

July/2024

Terraform – Cloud Agnostic Tool *

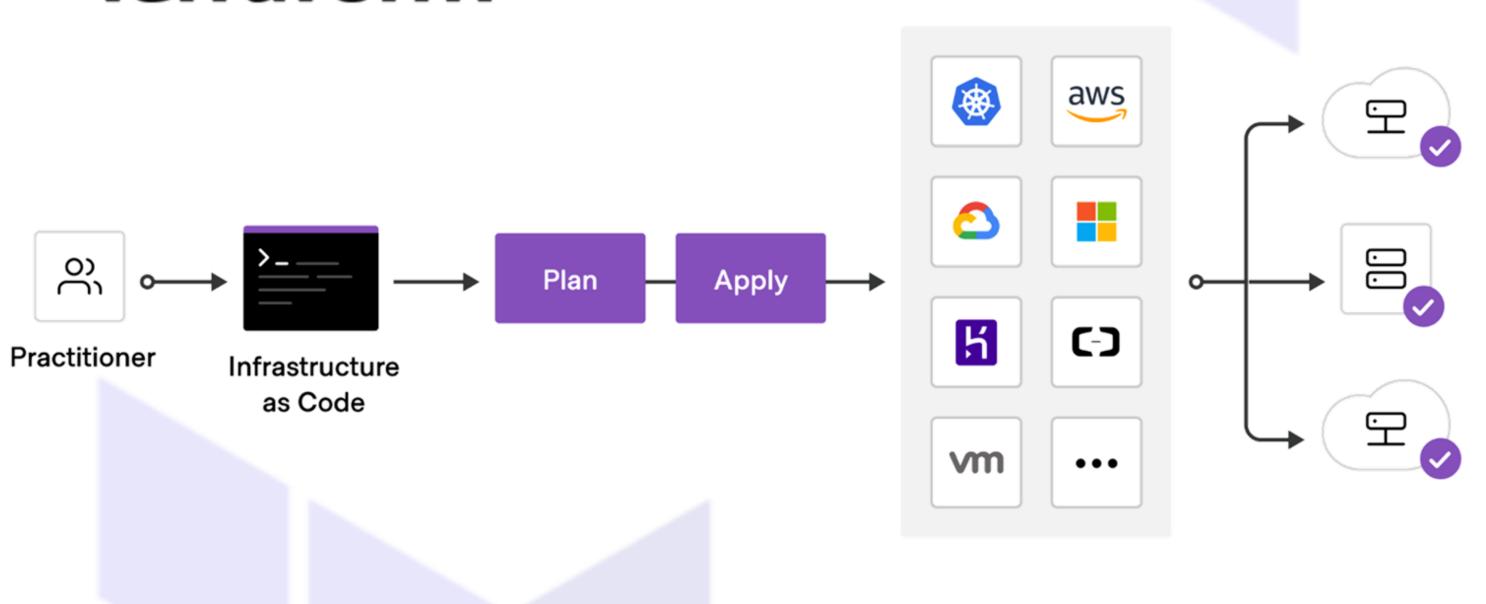


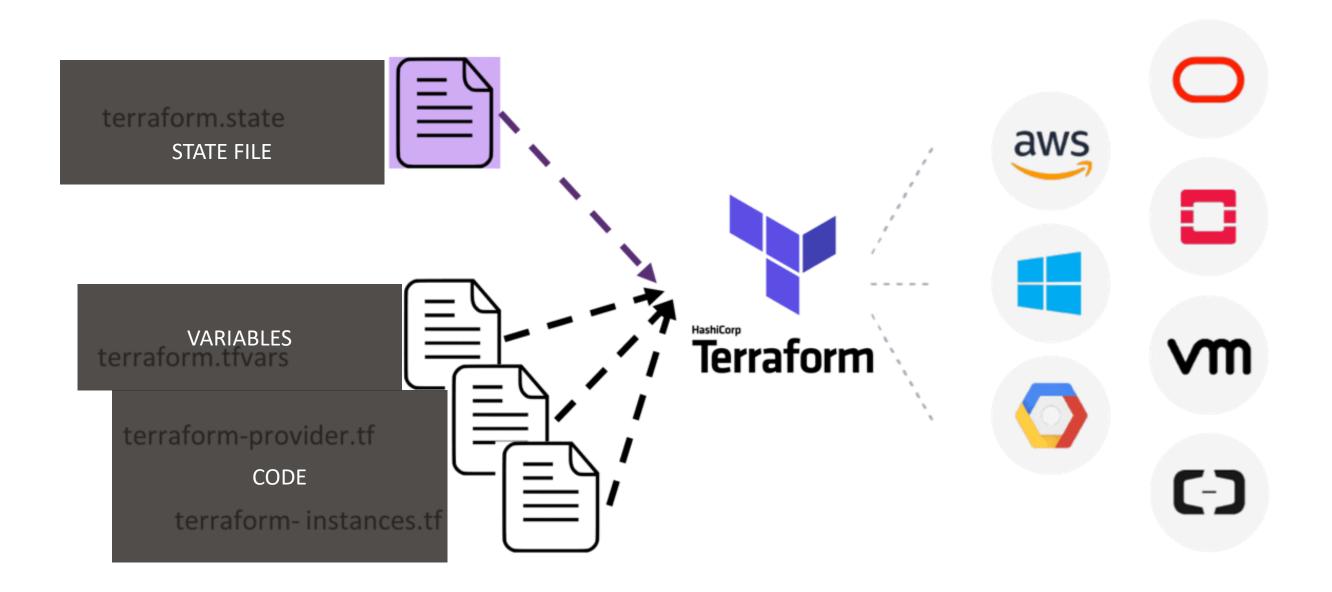
• It is not a golden bullet.

Provides a common language to orchestrate cloud resources and/or other providers.

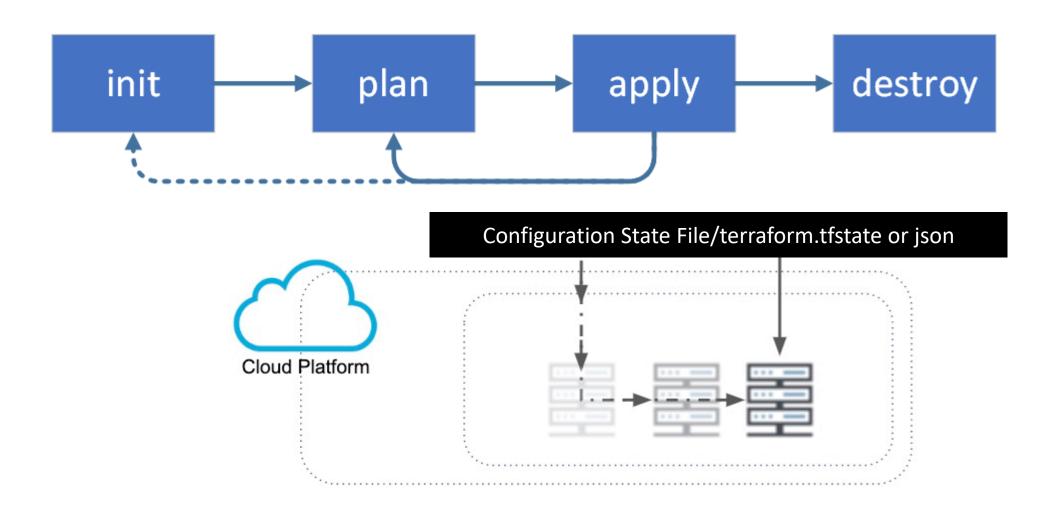
Terraform – Cloud Agnostic Tool *

Terraform









INPUT

Define variables: from the CLI, file, environment variables.

Types of variables:

* Simple: string, number, bool

* Constructed: list, set, map, object, tuple.

* Validation: regexp, null

OUTPUT

Attributes: Sensitive

```
🏋 main.tf M 🗴 🦖 terraform.tfstate
                                                                    ₩ variables.env U ×
                                                                                                                         🚏 terraform.tfvars U 🗙
🦞 main.tf > 😑 variable "region" > 🕬 default
                                                                                                                         🍟 terraform.tfvars > 👭 region
                                                                            set TF_VAR_tenancy_ocid=ocid1.tena
                                                                                                                                private_key_path="C:\\Users\\framoren\\
      variable "tenancy_ocid" {
                                                                            set TF_VAR_user_ocid=ocid1.user.oc
                                                                                                                                ssh_public_key="C:\\Users\\framoren\\.o
          description="el Identificador del Tenant"
                                                                            set TF_VAR_fingerprint=1d:6d:f7:00
                                                                                                                                region="us-ashburn-1"
          type=string
                                                                           set TF_VAR_compartment_ocid=ocid1
          default = ""
```

```
provider "oci" {
 reg terraform {
       required_providers {
         aws = {
           source = "hashicorp/aws"
           version = "~> 4.16"
       required_version = ">= 1.2.0"
     provider "aws" {
       region = "us-west-2"
     resource "aws_instance" "app_server" {
resou
                     = "ami-830c94e3"
       instance_type = "t2.micro"
 di:
         Name = "ExampleAppServerInstance"
outpu
```

variable provider data resource output

Module

Folder with code and has similar input and output

Terraform accesses TF files in the current folder only, does not enter to nested folders

Terraform — Tutorial

< AWS



Infrastructure as Code

Install

Build

Change

Destroy

Variables

Outputs

Remote state

Resources

Prerequisite: Region, default VPC, credentials

Workflow: Init, Apply, Change AMI (Replace?) Variables (Replace?) Workflow: Destroy

Taken from

https://developer.hashicorp.com/terrafor m/tutorials/aws-getstarted/infrastructure-as-code (29/07/2024)