

# R&D

# Docker and IaC

Daniel Lombardi

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# PATOS

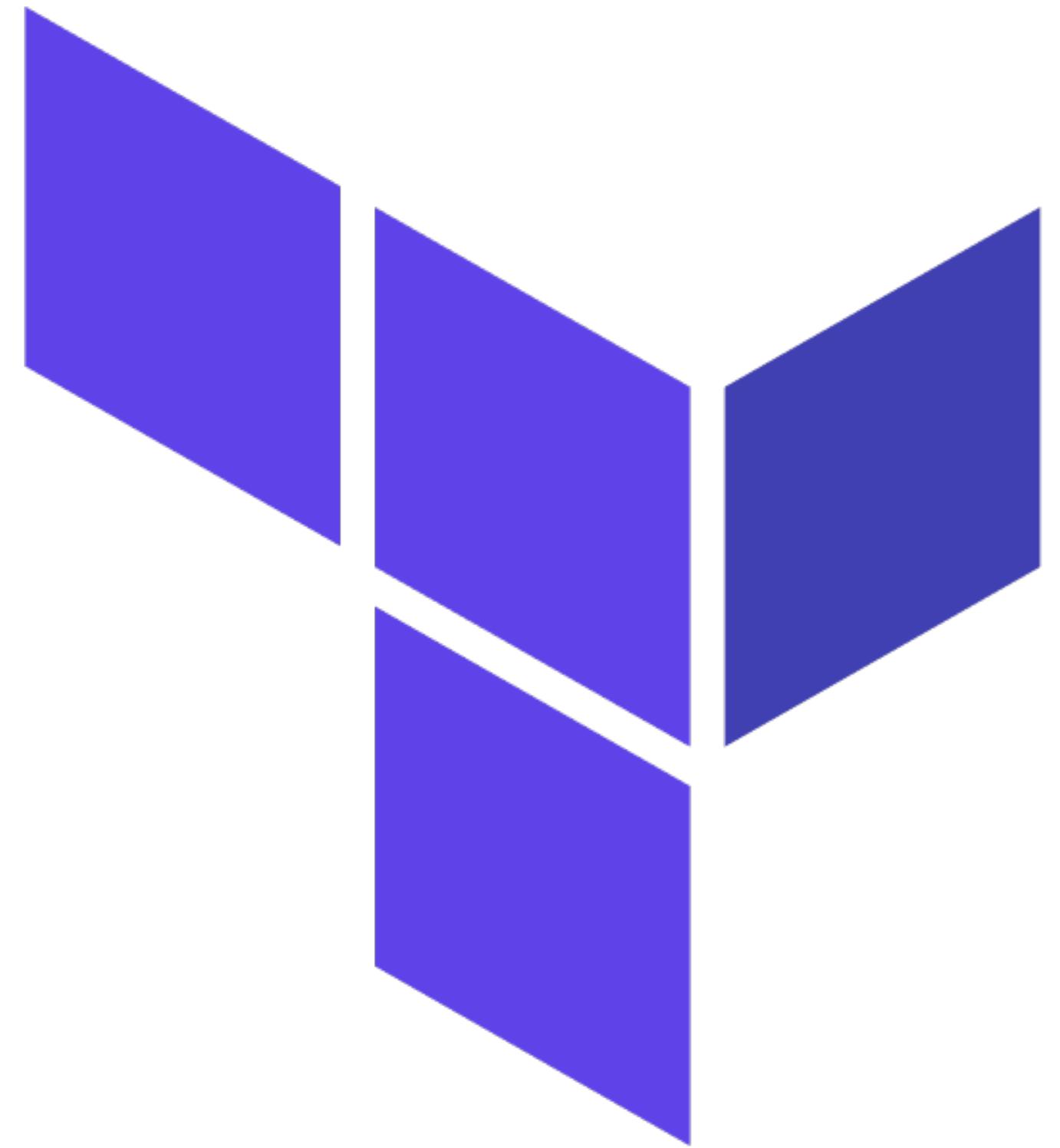
Pretty Awesome To Open Source

<https://pato.dev>



# What is IaC?

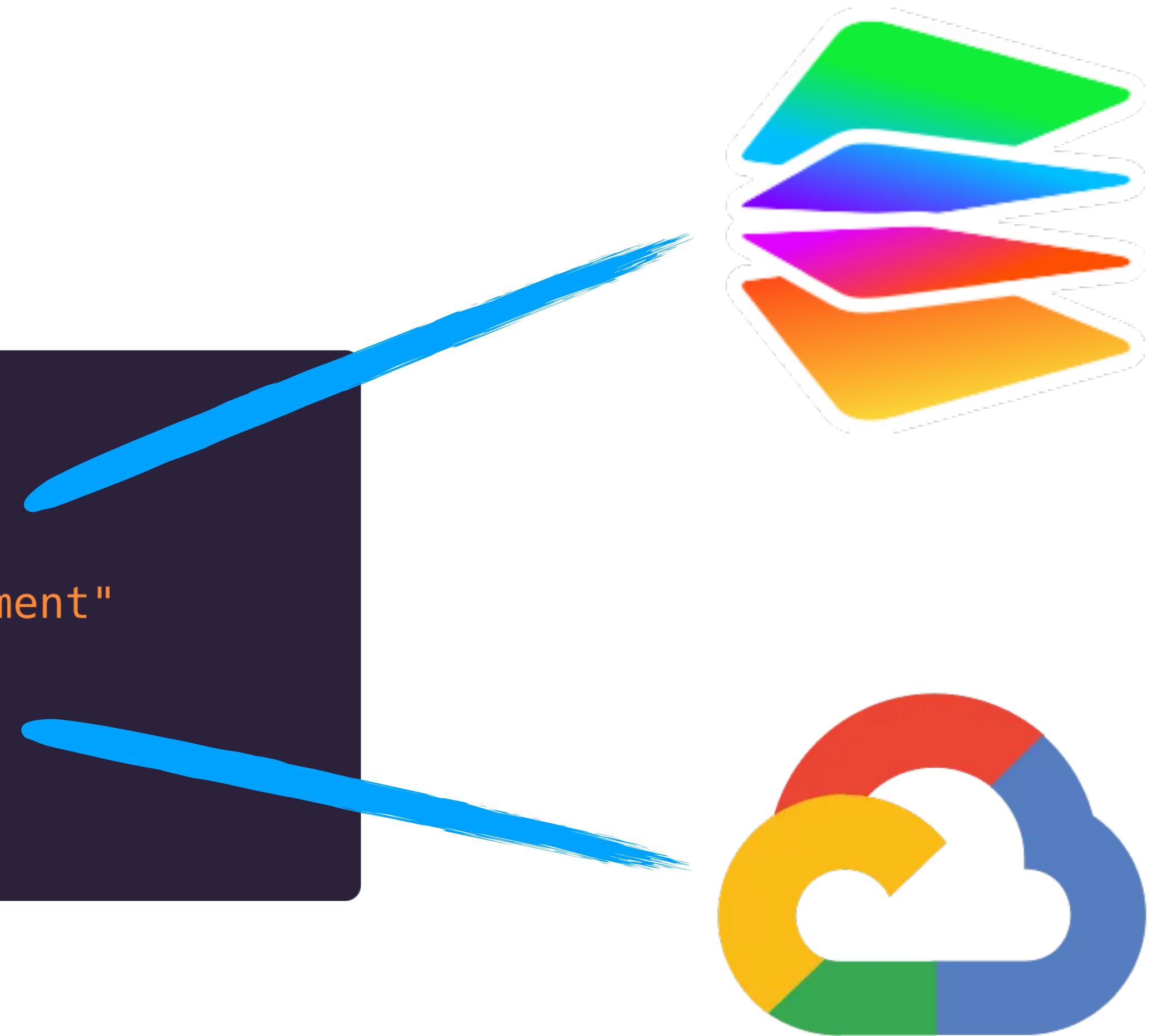
- Manage Infrastructure with config files, not clunky UIs
- Repeatable
- Safe
- Collaboration
- **Declarative**



# What is IaC?

```
● ● ●

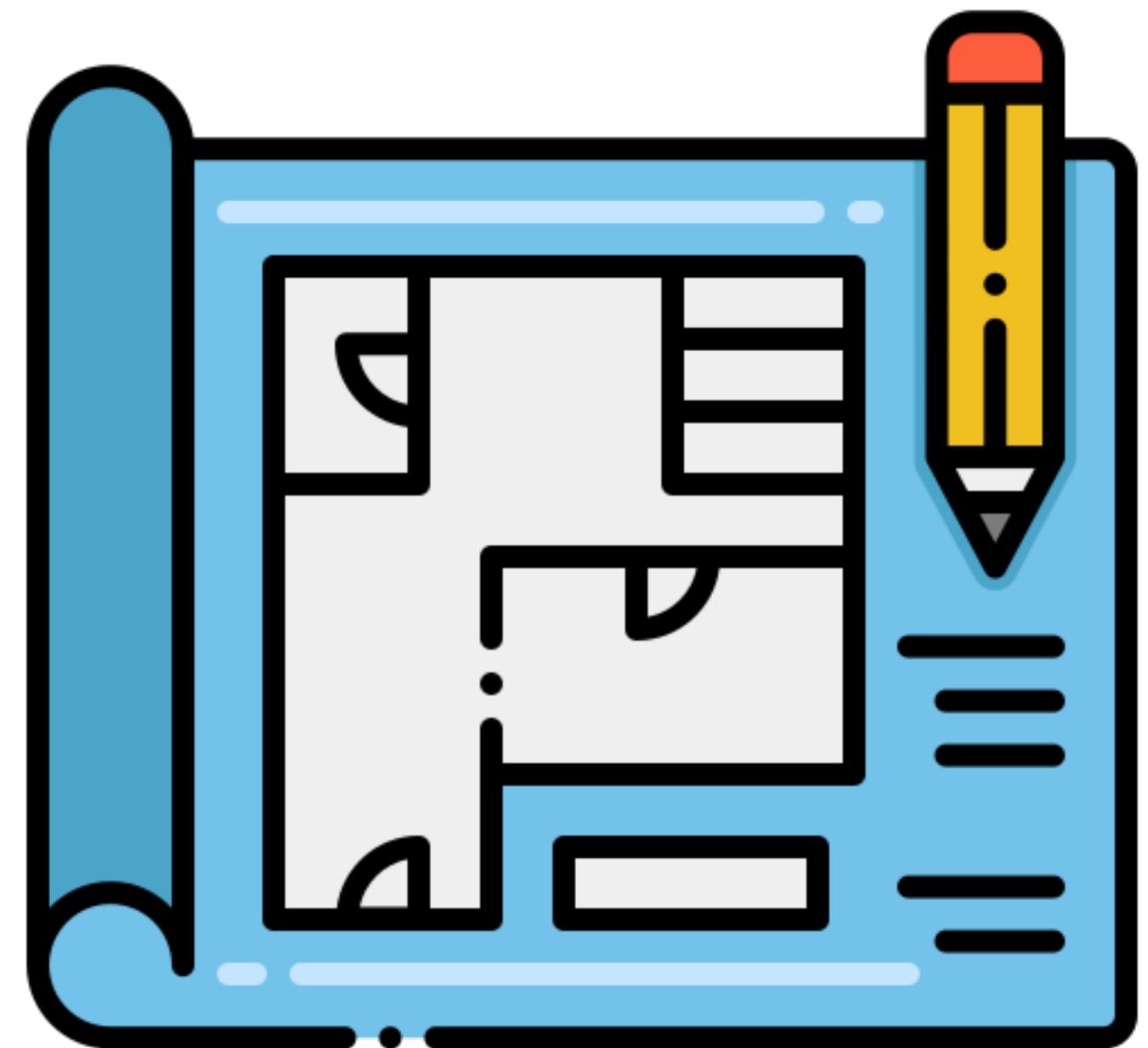
resource "mgc_virtual_machine_instances" "vm" {
  name          = "clickhouse-spec-test-first-experiment"
  machine_type = "BV8-32-20"
  image         = "cloud-ubuntu-22.04 LTS"
}
```



# What is IaC?

```
resource "mgc_virtual_machine_instances" "vm" {  
    name          = "clickhouse-spec-test-first-experiment"  
    machine_type = "BV8-32-20"  
    image         = "cloud-ubuntu-22.04 LTS"  
}
```

## Declarative



# .tf file

resource type

name

```
● ● ●  
resource "mgc_virtual_machine_instances" "vm" {  
    name        = "clickhouse-spec-test-first-experiment"  
    machine_type = "BV8-32-20"  
    image       = "cloud-ubuntu-22.04 LTS"  
}
```

# .tf file

```
• • •  
terraform {  
    required_providers {  
        mgc = {  
            source  = "magalucloud/mgc"  
            version = "0.33.0"  
        }  
    }  
}  
  
provider "mgc" {  
    region  = "br-se1"  
    api_key = var.api_key  
}
```

# Terraform Providers

<https://registry.terraform.io/>



```
#!/bin/bash  
terraform init -upgrade  
terraform apply -var-file=cloudlabs.tfvars
```

# Terraform Hands-On

[github.com/LombardiDaniel/lectures](https://github.com/LombardiDaniel/lectures)