

Infrastructure As A Code (Iaac)

Why Terraform?



01

Orchestration

02

Immutable Infrastructure

03

Declarative Code

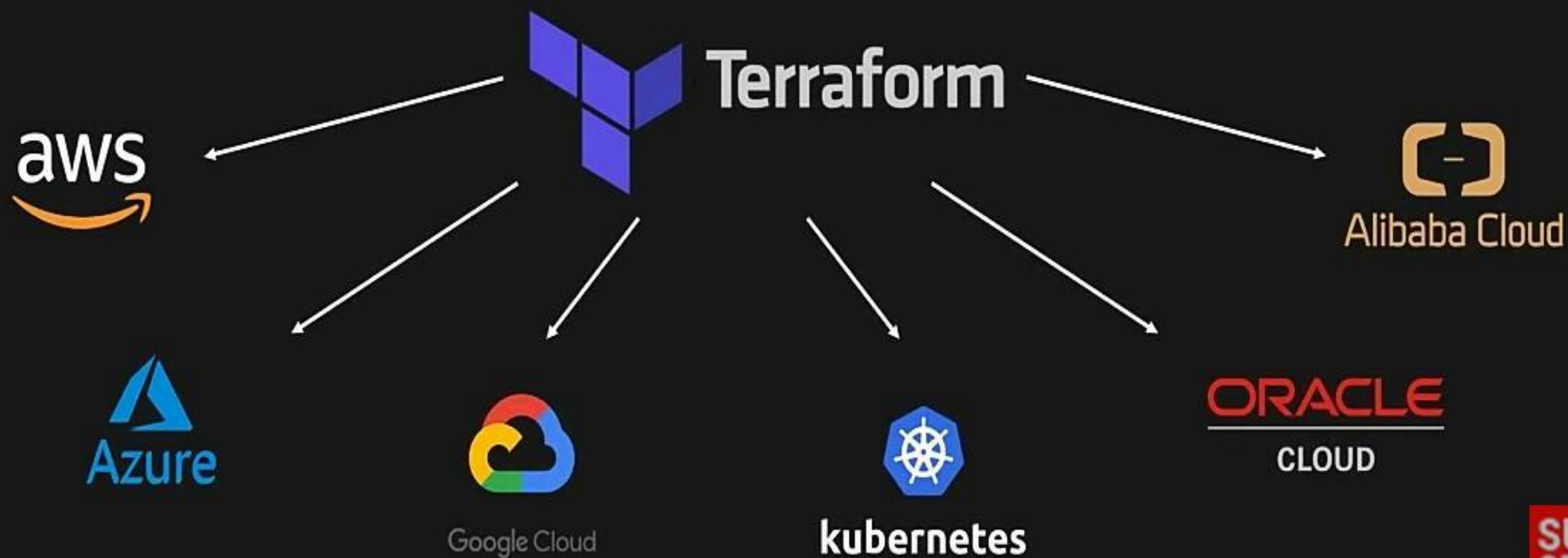
04

Client-Only Architecture

SUBS
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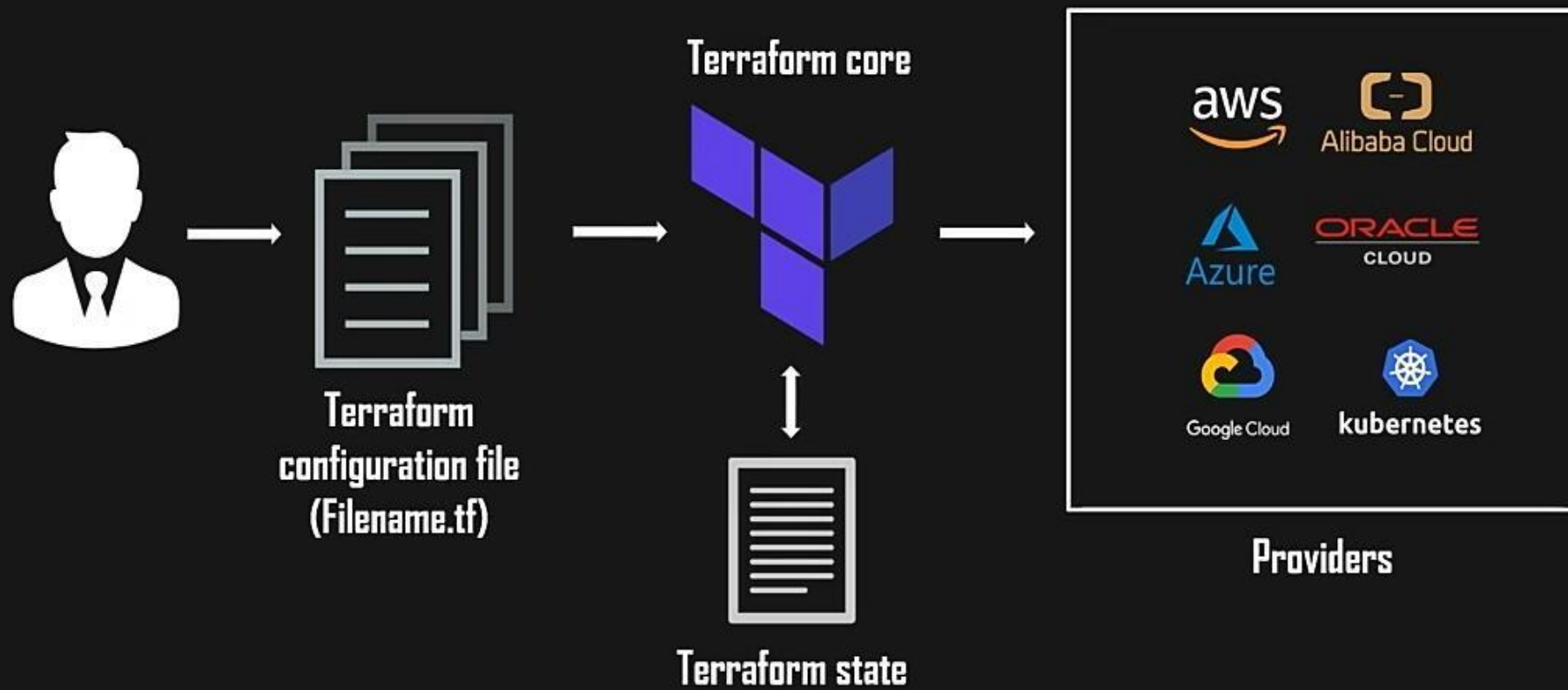
What is Terraform?

Terraform is an open-source Infrastructure-as-Code (IaC) tool developed by HashiCorp where you can store your cloud infrastructure setup as codes.



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How Does Terraform Work?



Terraform Use Case



Challenges

- Manage the infrastructure on multiple public clouds
- Fast set up of infrastructure
- Infrastructure inclusive of multiple environments and database backup

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Terraform Use Case



Benefits

Quickly create the
infrastructure over multiple
public clouds

Flexibility to launch
infrastructure when needed

Reduction in time to market

Automated backup

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Terraform Lifecycle



Commands

`terraform init`

`terraform plan`

`terraform apply`

`terraform destroy`

Ec2 Provisioning Using Terraform

► #AWS Instance

Configure the AWS Provider

```
provider "aws" {  
    region = "ap-south-1"  
    access_key = "AKIAUZBJNUI7NTZDR357"  
    secret_key =  
    "p/g8wtQeRO05Xo8UsQ+E8itACceJUpESq  
    anolbrT"  
  
}  
  
resource "aws_instance" "ec2" {  
    ami = "ami-02d47a75bafe6e320"  
    instance_type = "t2.micro"  
}
```