# **Terraform Task -2**

Launch Linux EC2 instances in two regions using a single Terraform file.

creating the provider file with 2 region

```
| The security group | The sec
```

Create the instance with the security group

```
= aws.us-east-1
= "ami-0427090fd1714168b" # Replace with a valid AMI ID in us-east-1
provider
ami
                  = "t2.micro"
= "temp"
instance type
key name
security_groups = [aws_security_group.allow_ssh_http.name]
tags = {
  Name = "US-East-Instance"
user data = <<-EOF
             sudo apt-get update -y
sudo apt-get install nginx -y
provider = aws.us-west-2
ami = "ami-074be47313f84fa38" # Replace with a valid AMI ID in us-west-2
ami
instance_type = "t2.micro"
kev_name = "temp1"
security_groups = [aws_security_group.allow_ssh_http_west.name]
tags = {
  Name = "US-West-Instance"
user_data = <<-EOF
             sudo apt-get update -y
              sudo apt-get install nginx -y
                                                                                                  Ln 93, Col 1 (2 selected) Spaces: 4 UTF-8 CRLF {} Terraform @ Go Live Q
```

## Create the instance with the security group

## output the IP

```
PS D:\Terraform 1> terraform init
Initializing the backend...
Initializing provider plugins...
- Reusing previous version of hashicorp/aws from the dependency lock file
- Using previously-installed hashicorp/aws v5.60.0

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.
```

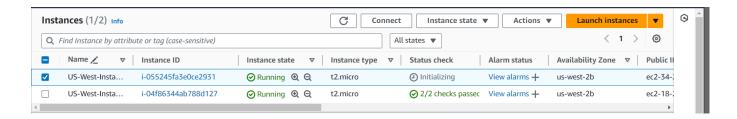
### CREATING THE TERRAFORM FILE.

```
PS <u>D:\Terraform 1</u>> terraform plan
aws_security_group.allow_ssh_http: Refreshing state... [id=sg-01c56c0f53fae99c6]
aws_security_group.allow_ssh_http_west: Refreshing state... [id=sg-0244e66154bdee9a6]
aws_instance.us_east_instance: Refreshing state... [id=i-0c645d063e46231f2]
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:
  # aws_instance.us_west_instance mile:
+ resource "aws_instance" "us_west_instance" {
= "ami-074be47313f84fa38"
                                                          = (known after apply)
                                                        = (known after apply)
= (known after apply)
        + associate_public_ip_address
        + availability_zone
                                                          = (known after apply)
        + cpu core count
                                                         = (known after apply)
= (known after apply)
        + cpu_threads_per_core
        + disable_api_stop
+ disable_api_termination
                                                         = (known after apply)
= (known after apply)
= false
        + ebs_optimized
        + get password data
        + host_id
                                                          = (known after apply)
        + host_resource_group_arn
                                                          = (known after apply)
        + iam_instance_profile
                                                          = (known after apply)
        + id
                                                          = (known after apply)
        + instance_initiated_shutdown_behavior = (known after apply)
        + instance_lifecycle
                                                        = (known after apply)
                                                        = (known after apply)
= (known after apply)
= "t2.micro"
= (known after apply)
= (known after apply)
= "temp1"
        + ipv6 address count
        + ipv6_addresses
        + key_name
        + monitoring
                                                          = (known after apply)
                                                          = (known after apply)
= (known after apply)
        + outpost_arn
        + password data
                                                          = (known after apply)
        + placement group
        + placement_partition_number
                                                          = (known after apply)
```

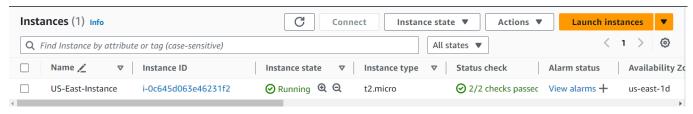
#### PLANNING PROCESS

```
Note: You didn't use the -out option to save this plan, so Terraform can't guarantee to take exactly these actions if you run "terraform apply" now.
PS D:\Terraform 1> terraform apply --auto-approve
aws_security_group.allow_ssh_http: Refreshing state... [id=sg-01c56c0f53fae99c6]
aws_security_group.allow_ssh_http_west: Refreshing state... [id=sg-02446661540dee9a6]
aws_instance.us_east_instance: Refreshing state... [id=i-0c645d063e46231f2]
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:
  \begin{tabular}{ll} \textbf{# aws\_instance.us\_west\_instance} & will & be & created \\ \end{tabular}
                                  "us_west_instance" {
= "ami-074be47313f84fa38"
  + resource "aws instance"
       + ami
                                                       = (known after apply)
        + associate_public_ip_address
                                                      = (known after apply)
        + availability_zone
                                                      = (known after apply)
                                                      = (known after apply)
        + cpu core count
                                                     = (known after apply)
= false
        + cpu_threads_per_core
        + disable_api_stop
        + disable_api_termination
        + ebs optimized
        + get_password_data
                                                      = (known after apply)
= (known after apply)
= (known after apply)
        + host_resource_group_arn
        + iam_instance_profile
                                                       = (known after apply)
          instance_initiated_shutdown_behavior = (known after apply)
          instance_lifecycle
                                                     = (known after apply)
                                                      = (known after apply)
= "t2.micro"
        + instance type
        + ipv6_address_count
                                                      = (known after apply)
                                                       = (known after apply)
= "temp1"
          ipv6_addresses
        + key_name
                                                       = (known after apply)
        + monitoring
                                                       = (known after apply)
        + outpost arn
        + password_data
                                                       = (known after apply)
```

CREATING THE INSTANCE USING TERRAFORM



## **CREATED INSTANCE**



ANOTHER ZONE INSTANCE