

Creation of ec2 using Terrform – Variables- Map-locals- count

Variable.tf

```
variable "access_key" {
  type = string
  description = "accesskey"
  default= "AKIA6LFFGBWBZMAPML"
}

variable "region1" {
  default = "us-east-1"
}
variable "region2" {
  default = "us-west-2"
}

variable "secret_key" {
  type = string
  description = "secretkey"
  default= "VITGSj+3VwbCmmdnjajGxMwNH1b9DEqJuZCZaS"
}
variable "amis" {
  type = map(string)
  default = {
    "us-east-1" = "ami-0c02fb55956c7d316"
    "us-west-2" = "ami-00ee4df451840fa9d"
  }
}

variable "instances_count" {
  type=number
  default = 2
}
```

Main.tf

```
provider "aws" {
    region = var.region1
    access_key= var.access_key
    secret_key=var.secret_key
}

resource "aws_instance" "terraform-ec2" {
    ami = var.amis["us-east-1"]
    instance_type = "t2.micro"
    tags = {
        "Name" = "${local.environment1}-ec2"
    }
    count=var.instances_count
}

provider "aws" {
    region = var.region2
    access_key= var.access_key
    secret_key=var.secret_key
    alias = "second-region"
}

resource "aws_instance" "terraform-ec2-2" {
    ami = var.amis["us-west-2"]
    instance_type = "t2.micro"
    tags = {
        "Name" = "${local.environment2}-ec2"
    }
    provider = "aws.second-region"
    count=var.instances_count
}
```

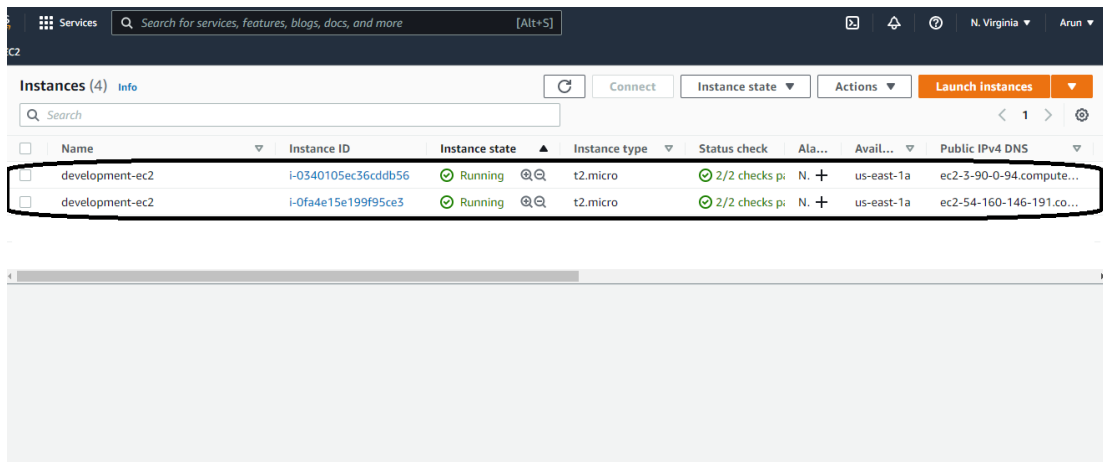
```
locals {  
  environment1="development"  
}
```

```
locals {  
  environment2="testing"  
}
```

Here,

1. Instances were created in two different regions.
2. In each region 2 instances were created using count.
3. Tag is done using locals
4. Map is used for AMI ID

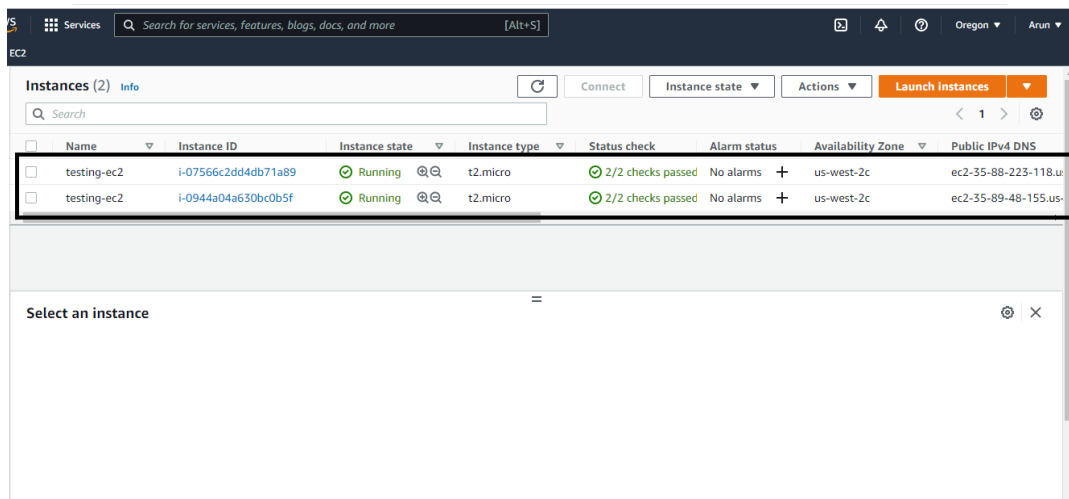
2 instances in us-east-1



The screenshot shows the AWS Management Console interface for the us-east-1 region. The 'Instances' page displays a list of 4 EC2 instances. Two instances, both named 'development-ec2', are highlighted with a red box. These instances are running t2.micro instances in the us-east-1a availability zone. The instance IDs are i-0340105ec36cddb56 and i-0fa4e15e199f95ce3. Both instances show '2/2 checks passed' and 'No alarms'.

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS
development-ec2	i-0340105ec36cddb56	Running	t2.micro	2/2 checks passed	No alarms	us-east-1a	ec2-3-90-0-94.compute-1.amazonaws.com
development-ec2	i-0fa4e15e199f95ce3	Running	t2.micro	2/2 checks passed	No alarms	us-east-1a	ec2-54-160-146-191.compute-1.amazonaws.com

2 instances in us-west-2



The screenshot shows the AWS Management Console interface for the us-west-2 region. The 'Instances' page displays a list of 2 EC2 instances. Two instances, both named 'testing-ec2', are highlighted with a red box. These instances are running t2.micro instances in the us-west-2c availability zone. The instance IDs are i-07566c2dd4db71a89 and i-0944a04a630bc0b5f. Both instances show '2/2 checks passed' and 'No alarms'.

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS
testing-ec2	i-07566c2dd4db71a89	Running	t2.micro	2/2 checks passed	No alarms	us-west-2c	ec2-35-88-223-118.us-west-2.compute.amazonaws.com
testing-ec2	i-0944a04a630bc0b5f	Running	t2.micro	2/2 checks passed	No alarms	us-west-2c	ec2-35-89-48-155.us-west-2.compute.amazonaws.com