

Experiment 6

Terraform Multiple tfvars Files

Aim

Learn how to use multiple tfvars files in Terraform for different environments.

Steps

1. Create a main file, instance.tf file & variables.tf file for EC2 Instance.

```
main.tf
1 terraform {
2   required_providers {
3     aws = {
4       source = "hashicorp/aws"
5       version = "5.31.0"
6     }
7   }
8 }
9
10 provider "aws" {
11   region = var.region
12   access_key = var.access_key
13   secret_key = var.secret_key
14 }
15
```

```
instance.tf
1 resource "aws_instance" "Ayroid-ec2" {
2   instance_type = var.instance_type
3   ami = var.ami
4   count = 1
5
6   tags = {
7     Name = "Exp5-Instance"
8   }
9 }
```

```

variables.tf
1  variable region {
2      type      = string
3      default    = "ap-south-1"
4      description = "AWS Region"
5  }
6
7  variable "ami" {
8      type      = string
9      default    = "ami-03f4878755434977f"
10     description = "AMI ID"
11 }
12
13 variable "instance_type" {
14     type      = string
15     default    = "t2.micro"
16     description = "Instance Type"
17 }
18

```

2. Create two tfvars files for different environments

a. dev.tfvars

```

dev.tfvars
1  region= "ap-south-1"
2  ami= "ami-03f4878755434977f"
3  instance_type = "t2.micro"

```

b. prod.tfvars

```

prod.tfvars
1  region= "us-east-1"
2  ami= "ami-0c7217cdde317cfec"
3  instance_type = "t2.micro"

```

3. Initialize and provision resources in both environments

a. dev

```

➔ Exp2 terraform apply -var-file=dev.tfvars

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.Ayroid-ec2[0] will be created
+ resource "aws_instance" "Ayroid-ec2" {

```

b. prod

```
Exp2 terraform apply -var-file=prod.tfvars
aws_instance.Ayroid-ec2[0]: Refreshing state... [id=i-0c845335fb832ccf9]

Terraform used the selected providers to generate the following execution plan. Resource actions
+ create





Terraform will perform the following actions:

# aws_instance.Ayroid-ec2[0] will be created
+ resource "aws_instance" "Ayroid-ec2" {
```

4. Verify resources


a. dev

[Alt+S]



Mumbai ▾Ayroid ▾

Instances (1) [Info](#)



Connect





Instance state ▾

Actions ▾

Launch instances ▾





Running ▾

< 1 > ⚙

| <input type="checkbox"/> | Name  ▾ | Instance ID | Instance state ▾ | Instance type |
|--------------------------|--|---------------------|---|---------------|
| <input type="checkbox"/> | Exp5-Instance | I-0c845335fb832ccf9 |  Running   | t2.micro |


b. prod

[Alt+S]



N. Virginia ▾Ayroid ▾

Instances (1) [Info](#)



Connect





Instance state ▾

Actions ▾

Launch instances ▾

Any state ▾

< 1 > ⚙

| <input type="checkbox"/> | Name  ▾ | Instance ID | Instance state ▾ | Instance type ▾ |
|--------------------------|--|---------------------|---|-----------------|
| <input type="checkbox"/> | Exp5-Instance | I-03c0e1f8632eaeaaa |  Running   | t2.micro |

5. Clean up resources in both environments

a. dev

```
→ Exp2 terraform destroy -var-file=dev.tfvars  
aws_instance.Ayroid-ec2[0]: Refreshing state... [id=i-0ea2577c5a7fa799a]
```

Terraform used the selected providers to generate the following execution plan. Resource actions are indicated with the following symbols:

- destroy

Terraform will perform the following actions:

```
# aws_instance.Ayroid-ec2[0] will be destroyed
```

b. prod

```
→ Exp2 terraform destroy -var-file=prod.tfvars  
aws_instance.Ayroid-ec2[0]: Refreshing state... [id=i-03c0e1f8632eaeaaa]
```

Terraform used the selected providers to generate the following execution plan. Resource actions are indicated with the following symbols:

- destroy

Terraform will perform the following actions:

```
# aws_instance.Ayroid-ec2[0] will be destroyed  
- resource "aws_instance" "Ayroid-ec2" {
```