

SPCM LAB

Gopika Jhanwar

500093662

R2142210318

Btech cse devops B2

Lab Exercise 6– Terraform Multiple tfvars Files

1. Create a Terraform Directory:

mkdir terraform-multiple-tfvars

cd terraform-multiple-tfvars

- Create a file named main.tf:

```
terraform-cli-variables > main.tf
1  provider "aws" {
2    region = var.region
3    access_key = "AKIAYS2NV47DL6IMWZUT"
4    secret_key = "/QPd3G4RWG+EBH0VokYojkAI75GSDhztlZS88ugs
5  }
6  resource "aws_instance" "example" {
7    ami
8    = var.ami
9    instance_type = var.instance_type
10 }
11
```

- Create a file named variables.tf:

```
terraform-cli-variables > variable.tf
1  variable "region" {
2    description = "AWS region"
3    default     = "us-west-2"
4  }
5
6  variable "ami" {
7    description = "AMI ID"
8    default     = "ami-052c9ea013e6e3567"
9  }
10
11 variable "instance_type" {
12   description = "EC2 Instance Type"
13   default     = "t2.small"
14 }
```

2. Create Multiple tfvars Files:

- Create a file named dev.tfvars:

```
terraform-multiple-tfvars > dev.tfvars
1   region      = "us-west-2"
2   ami         = "ami-052c9ea013e6e3567"
3   instance_type = "t2.micro"
```

- Create a file named prod.tfvars:

```
terraform-multiple-tfvars > prod.tfvars
1   region      = "us-east-1"
2   ami         = "ami-0440d3b780d96b29d"
3   instance_type = "t2.large"
4
```

3. Initialize and Apply for Dev Environment:

terraform init

```
PS D:\6 th sem\SPCM\SPCM LAB\teraform lab files\terraform-multiple-tfv
ars> terraform init

Initializing the backend...

Initializing provider plugins...
- Reusing previous version of hashicorp/aws from the dependency lock f
ile
- Using previously-installed hashicorp/aws v5.38.0

Terraform has been successfully initialized!
```

terraform apply -var-file=dev.tfvars

```
Plan: 1 to add, 0 to change, 0 to destroy.

Do you want to perform these actions?
  Terraform will perform the actions described above.
  Only 'yes' will be accepted to approve.

  Enter a value: yes

aws_instance.example: Creating...
aws_instance.example: Still creating... [10s elapsed]
aws_instance.example: Still creating... [20s elapsed]
aws_instance.example: Still creating... [30s elapsed]
aws_instance.example: Creation complete after 37s [id=i-0c2d4b04333a99
612]

Apply complete! Resources: 1 added, 0 changed, 0 destroyed.
PS D:\6 th sem\SPCM\SPCM LAB\teraform lab files\terraform-multiple-tfv
```

4. Initialize and Apply for Prod Environment:

terraform init

```
PS D:\6 th sem\SPCM\SPCM LAB\teraform lab files\terraform-multiple-tfv
ars> terraform init

Initializing the backend...

Initializing provider plugins...
- Reusing previous version of hashicorp/aws from the dependency lock f
ile
- Using previously-installed hashicorp/aws v5.38.0

Terraform has been successfully initialized!
```

terraform apply -var-file=prod.tfvars

```
}

Plan: 1 to add, 0 to change, 0 to destroy.

Do you want to perform these actions?
  Terraform will perform the actions described above.
  Only 'yes' will be accepted to approve.

  Enter a value: yes

aws_instance.example: Creating...
aws_instance.example: Still creating... [10s elapsed]
aws_instance.example: Still creating... [20s elapsed]
aws_instance.example: Creation complete after 27s [id=i-049558a5b9e0b7
270]

Apply complete! Resources: 1 added, 0 changed, 0 destroyed.
PS D:\6 th sem\SPCM\SPCM LAB\teraform lab files\terraform-multiple-tfv
ars>
```

5. Test and Verify:

<input type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv
<input type="checkbox"/>		i-0c2d4b04333a99612	Running	t2.micro	2/2 checks passed	View alarms	us-west-2b	ec2-54-20

<input type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS
<input type="checkbox"/>		i-0a9f5e2956f4e325f	Terminated	t2.micro	-	View alarms	us-east-1a	-
<input type="checkbox"/>		i-049558a5b9e0b7270	Running	t2.large	Initializing	View alarms	us-east-1e	ec2-100-25-138-35

6. Clean Up:

terraform destroy -var-file=dev.tfvars

[Alt+S]								
Instances (1) Info								
<input type="text" value="Find Instance by attribute or tag (case-sensitive)"/>				<input type="button" value="Connect"/> <input type="button" value="Instance state"/> <input type="button" value="Actions"/>		<input type="button" value="Launch instances"/>		
<input type="text" value="Any state"/>								
<input type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Publi
<input type="checkbox"/>		i-0c2d4b04333a99612	Shutting-d...	t2.micro	2/2 checks passed	View alarms	us-west-2b	ec2-5

```

PS D:\6 th sem\SPCM\SPCM LAB\teraform lab files\terraform-multiple-tfv
rs> terraform destroy -var-file="dev.tfvars"
aws_instance.example: Refreshing state... [id=i-049558a5b9e0b7270]

No changes. No objects need to be destroyed.

Either you have not created any objects yet or the existing objects
were already deleted outside of Terraform.

Destroy complete! Resources: 0 destroyed.
PS D:\6 th sem\SPCM\SPCM LAB\teraform lab files\terraform-multiple-tfv
rs>

```

terraform destroy -var-file=prod.tfvars

Instances (2) Info

Refresh

Connect

Instance state ▾

Actions ▾

Launch instances ▾

Find Instance by attribute or tag (case-sensitive)

Any state ▾

< 1 > ⚙

<input type="checkbox"/>	Name <div>✎</div> ▾	Instance ID	Instance state ▾	Instance type ▾	Status check	Alarm status	Availability Zone ▾	Public IPv4 D
<input type="checkbox"/>		i-0a9f5e2956f4e325f	⊖ Terminated <div>🔍</div> <div>🔍</div>	t2.micro	-	View alarms <div>+</div>	us-east-1a	-
<input type="checkbox"/>		i-049558a5b9e0b7270	⊖ Shutting-d... <div>🔍</div> <div>🔍</div>	t2.large	-	View alarms <div>+</div>	us-east-1e	ec2-100-25-1

```

PS D:\6 th sem\SPCM\SPCM LAB\teraform lab files\terraform-multiple-tfv
ars> terraform destroy -var-file="prod.tfvars"

No changes. No objects need to be destroyed.

Either you have not created any objects yet or the existing objects
were already deleted outside of Terraform.

Destroy complete! Resources: 0 destroyed.
PS D:\6 th sem\SPCM\SPCM LAB\teraform lab files\terraform-multiple-tfv
ars>

```