

Lab Exercise 5– Terraform Variables with Command Line Arguments

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B. Tech. CSE-DevOps – B1, 6th SEM

1. Create Terraform Configuration File:

```
main.tf > resource "aws_instance" "UPES"
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 = "ap-south-1"
12   access_key = "AKIATQMU37PQBDMOBLE2"
13   secret_key = "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"
14 }
15
16 resource "aws_instance" "UPES" {
17   ami = var.ami
18   instance_type = var.instance_type
19
20   tags = {
21     Name = "EC2-Instnace"
22   }
23 }
```

2. Define Variables

```
var.tf > variable "instance_type"
1 variable "ami" {
2   type = string
3   default = "ami-03f4878755434977f"
4 }
5
6 variable "instance_type" {
7   type = string
8   default = "t2.micro"
9 }
```

3. Use Command Line Arguments

```
PS D:\DevOps\LAB\SPCM\TERRAFORM-SCRIPTS> terraform plan -var 'ami=ami-0449c34f967dbf18a' -var 'instance_type=t2.micro'
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.UPES will be created
+ resource "aws_instance" "UPES" {
  + ami               = "ami-0449c34f967dbf18a"
  + arn               = (known after apply)
  + associate_public_ip_address = (known after apply)
  + availability_zone = (known after apply)
  + cpu_core_count    = (known after apply)
  + cpu_threads_per_core = (known after apply)
  + disable_api_stop   = (known after apply)
  + disable_api_termination = (known after apply)
  + ebs_optimized      = (known after apply)
  + get_password_data  = false
  + 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)
  + instance_state     = (known after apply)
  + instance_type      = "t2.micro"
  + ipv6_address_count = (known after apply)
}
```

```
PS D:\DevOps\LAB\SPCM\TERRAFORM-SCRIPTS> terraform apply -var 'ami=ami-0449c34f967dbf18a' -var 'instance_type=t2.micro' -auto-approve
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.UPES will be created
+ resource "aws_instance" "UPES" {
  + ami               = "ami-0449c34f967dbf18a"
  + arn               = (known after apply)
  + associate_public_ip_address = (known after apply)
  + availability_zone = (known after apply)
  + cpu_core_count    = (known after apply)
  + cpu_threads_per_core = (known after apply)
  + disable_api_stop   = (known after apply)
  + disable_api_termination = (known after apply)
  + ebs_optimized      = (known after apply)
  + get_password_data  = false
  + 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)
  + instance_state     = (known after apply)
  + instance_type      = "t2.micro"
}
```

4. Check Console

Instances (1) Info						
<input type="text" value="Find Instance by attribute or tag (case-sensitive)"/>				Any state ▾		
<input type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status check	Alarm status
<input type="checkbox"/>	EC2-Instnace	i-04906c82d4a655add	Running	t2.micro	2/2 checks passed	View alarms +

5. Clean Up

```
- volume_size      = 8 -> null
- volume_type      = "gp3" -> null
}
}
```

```
Plan: 0 to add, 0 to change, 1 to destroy.
aws_instance.UPES: Destroying... [id=i-04906c82d4a655add]
aws_instance.UPES: Still destroying... [id=i-04906c82d4a655add, 10s elapsed]
aws_instance.UPES: Still destroying... [id=i-04906c82d4a655add, 20s elapsed]
aws_instance.UPES: Still destroying... [id=i-04906c82d4a655add, 30s elapsed]
aws_instance.UPES: Destruction complete after 30s

Destroy complete! Resources: 1 destroyed.
PS D:\DevOps\LAB\SPCM\TERRAFORM-SCRIPTS>
```