Terraform.tfvars Files

Table of Content

- Terraform variable file variable.tf
- Terraform tfvars file terraform.tfvars
- Terraform multiple tfvars file
- Terraform setting variable using command line var
- 1. Terraform Variables

Create a main.tf file

```
provider "aws" {
    region = "eu-central-1"
    access_key = "AKIATQ37NXB2AYK7R6PQ"
    secret_key = "S1Yg1Qm2JNSej8EHdhPTiu515ZD36URsedf32kNT"
}

resource "aws_instance" "ec2_example" {
    ami = "ami-0767046d1677be5a0"
    instance_type = var.instance_type

    tags = {
        Name = "Terraform EC2"
    }
}
```

Now create variable.tf

```
variable "instance_type" {
  description = "Instance type t2.micro"
  type = string
  default = "t2.micro"
}
```

Here is the sequence of terraform commands which you need to run

```
terraform init
```

```
terraform plan
```

```
terraform apply
```

And finally, you can destroy the complete environment using -

```
terraform destroy
```

2. Terraform tfvars file - terraform.tfvars

Create a main.tf file

```
provider "aws" {
    region = "eu-central-1"
    access_key = "AKIATQ37NXB2AYK7R6PQ"
    secret_key = "S1Yg1Qm2JNSej8EHdhPTiu515ZD36URsedf32kNT"
}

resource "aws_instance" "ec2_example" {
    ami = "ami-0767046d1677be5a0"
    instance_type = var.instance_type

    tags = {
        Name = "Terraform EC2"
    }
}
```

Now create variable.tf but without any default values

```
variable "instance_type" {
}
```

Finally create terraform.tfvars

```
instance_type="t2.micro"
```

Here is the sequence of terraform commands which you need to run

```
terraform init
```

terraform plan

```
terraform apply
```

And finally, you can destroy the complete environment using -

```
terraform destroy
```

3. Terraform multiple tfvars file

There can be situations where you need to create multiple thars files based on the environment like a stage, production.

So in such a scenario, you can create one tfvars file for each environment -

- 1. stage.tfvars
- 2. production.tfvars

First Create your main.tf

```
ovider "aws" {
    region = "eu-central-1"
    access_key = "AKIATQ37NXB2AYK7R6PQ"
    secret_key = "S1Yg1Qm2JNSej8EHdhPTiu515ZD36URsedf32kNT"
}
resource "aws_instance" "ec2_example" {
    ami = "ami-0767046d1677be5a0"
    instance_type = var.instance_type

tags = {
        Name = var.environment_name
    }
}
```

Second, create your variable.tf

```
variable "instance_type" {
}
variable "environment_name" {
}
```

And third, create your stage.tfvars for staging

```
instance_type="t2.micro"
environment_name = "stage"
```

Apply the terraform configuration using the following command -

```
terraform init
```

```
terraform plan -var-file="stage.tfvars"
```

And then

```
terraform apply -var-file="stage.tfvars"
```

You can destroy the environment by running the following command

```
terraform destroy -var-file="stage.tfvars"
```

4. Terraform setting variable using command line var

Create a main.tf file

```
provider "aws" {
    region = "eu-central-1"
    access_key = "AKIATQ37NXB2AYK7R6PQ"
    secret_key = "S1Yg1Qm2JNSej8EHdhPTiu515ZD36UsdfA99NyYT"
}

resource "aws_instance" "ec2_example" {
    ami = "ami-0767046d1677be5a0"
    instance_type = var.instance_type

    tags = {
        Name = "Terraform EC2"
    }
}

variable "instance_type" {
}
```

Now run the following terraform command

```
terraform init
```

```
terraform plan -var="instance_type=t2.micro"
```

```
terraform apply -var="instance_type=t2.micro"
```

Finally, you destroy the EC2 environment using the following command -

```
terraform destroy -var="instance_type=t2.micro"
```