

Members

Huzefa Anver (2303.KHI.DEG.002)

Syed Mohammad Anjil Hussain Rizvi (2303.KHI.DEG.031)

Our main.tf file

A screenshot of a code editor window titled 'main.tf'. The window has a menu bar with 'Open', 'Save', and window control buttons. The file path is shown as '~/Desktop/data_engineering_bootcamp_2303/tasks/5_data_pipelines/day_5_laC/Assignment 5.5A'. The code is written in HCL (HashiCorp Configuration Language) for Terraform. It defines required providers for AWS, sets the provider version to 4.39, specifies the AWS region as eu-central-1, creates an S3 bucket named 'my_bucket' with the name 'huzefa-anver-bucket', and outputs the bucket's ID.

```
1 terraform {  
2   required_providers {  
3     aws = {  
4       source = "hashicorp/aws"  
5       version = "~> 4.39"  
6     }  
7   }  
8  
9   required_version = ">= 1.2.0"  
10 }  
11  
12 provider "aws" {  
13   region = "eu-central-1"  
14 }  
15  
16  
17 resource "aws_s3_bucket" "my_bucket" {  
18   bucket = "huzefa-anver-bucket"  
19 }  
20  
21  
22 output "bucket_id" {  
23   value = aws_s3_bucket.my_bucket.id  
24 }
```

Here we have created a config file defining our tool and its version, our provider aws and the region we want, our resources we want to create s3 bucket, and the output we to print after creation bucket id.

Terraform apply

```
huzefaانver@all-MS-7035:~/Desktop/data_engineering_bootcamp_2303/tasks/S_data_pipelines/day_5_IaC/Assignment 5.54$ terraform apply

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_s3_bucket.my_bucket will be created
+ resource "aws_s3_bucket" "my_bucket" {
+   acceleration_status      = (known after apply)
+   acl                      = (known after apply)
+   arn                      = (known after apply)
+   bucket                   = "huzefa-anver-bucket"
+   bucket_domain_name       = (known after apply)
+   bucket_prefix            = (known after apply)
+   bucket_regional_domain_name = (known after apply)
+   force_destroy            = false
+   hosted_zone_id           = (known after apply)
+   id                       = (known after apply)
+   object_lock_enabled      = (known after apply)
+   policy                   = (known after apply)
+   region                   = (known after apply)
+   request_payer            = (known after apply)
+   tags_all                 = (known after apply)
+   website_domain           = (known after apply)
+   website_endpoint         = (known after apply)
}

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

Changes to Outputs:
+ bucket_id = (known after apply)

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

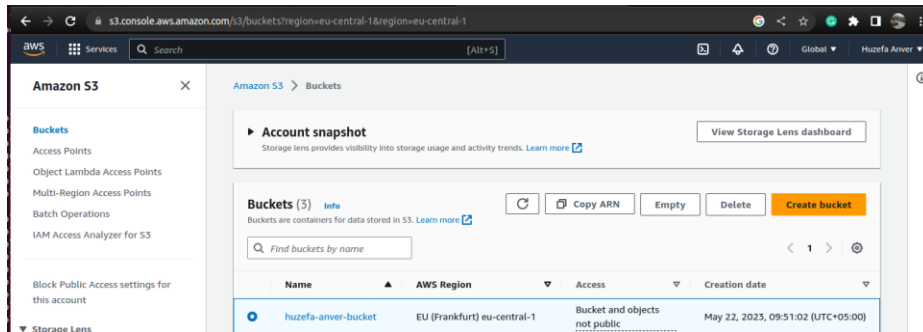
aws_s3_bucket.my_bucket: Creating...
aws_s3_bucket.my_bucket: Creation complete after 4s [id=huzefa-anver-bucket]

Apply complete! Resources: 1 added, 0 changed, 0 destroyed.

Outputs:
bucket_id = "huzefa-anver-bucket"
```

After terraform init we can apply our main.tf file we created which will create the resources and output the data as we defined.

Created bucket in aws cloud



We can see over here our bucket is created in our aws cloud.

Terraform destroy

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

Changes to Outputs:
  bucket_id = "huzefa-anver-bucket" -> null

Do you really want to destroy all resources?
  Terraform will destroy all your managed infrastructure, as shown above.
  There is no undo. Only 'yes' will be accepted to confirm.

Enter a value: yes

aws_s3_bucket.my_bucket: Destroying... [id=huzefa-anver-bucket]
aws_s3_bucket.my_bucket: Destruction complete after 1s

Destroy complete! Resources: 1 destroyed.
```

Lastly, we are destroying our bucket using terraform destroy command, which will delete our bucket from our aws cloud.