**Main.tf**

GNU nano 7.2 main.tf

provider "aws" {

region = "eu-north-1"

}

# Create an S3 bucket

resource "aws\_s3\_bucket" "my\_bucket" {

bucket = "brian-azubi-lab"

tags = {

Name = "My Terraform S3 Bucket"

}

}

#bucket ownership control

resource "aws\_s3\_bucket\_ownership\_controls" "my\_bucket" {

bucket = aws\_s3\_bucket.my\_bucket.id

rule {

object\_ownership = "BucketOwnerPreferred"

}

}

#The bucket ACL is set to private, read access will be granted through IAM

resource "aws\_s3\_bucket\_acl" "my\_bucket" {

depends\_on = [aws\_s3\_bucket\_ownership\_controls.my\_bucket]

bucket = aws\_s3\_bucket.my\_bucket.id

acl = "private"

}

# Create an IAM user

resource "aws\_iam\_user" "my\_user" {

name = "Devops\_Brian"

}

# Create IAM user access keys

resource "aws\_iam\_access\_key" "my\_user\_access\_key" {

user = aws\_iam\_user.my\_user.name

}

# Create IAM policy for S3 access

resource "aws\_iam\_policy" "my\_policy" {

name = "MyS3BucketPolicy"

description = "My IAM policy for S3 bucket access"

policy = jsonencode({

Version = "2012-10-17"

Statement = [

{

Effect = "Allow"

Action = [

"s3:GetObject",

"s3:PutObject",

"s3:DeleteObject",

]

Resource = [

aws\_s3\_bucket.my\_bucket.arn,

"${aws\_s3\_bucket.my\_bucket.arn}/\*",

]

},

]

})

}

**Terraform init**

**Terraform Apply**

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$ terraform apply

**aws\_iam\_user.my\_user: Refreshing state... [id=Devops\_Brian]**

**aws\_iam\_access\_key.my\_user\_access\_key: Refreshing state... [id=AKIA3CLRUPU464TKYNFV]**

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\_iam\_policy.my\_policy** will be created

+ resource "aws\_iam\_policy" "my\_policy" {

+ arn = (known after apply)

+ description = "My IAM policy for S3 bucket access"

+ id = (known after apply)

+ name = "MyS3BucketPolicy"

+ name\_prefix = (known after apply)

+ path = "/"

+ policy = (known after apply)

+ policy\_id = (known after apply)

+ tags\_all = (known after apply)

}

**# aws\_iam\_user\_policy\_attachment.my\_user\_attachment** will be created

+ resource "aws\_iam\_user\_policy\_attachment" "my\_user\_attachment" {

+ id = (known after apply)

+ policy\_arn = (known after apply)

+ user = "Devops\_Brian"

}

**# 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 = "brian-azubi-lab"

+ 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 = {

+ "Name" = "My Terraform S3 Bucket"

}

+ tags\_all = {

+ "Name" = "My Terraform S3 Bucket"

}

+ website\_domain = (known after apply)

+ website\_endpoint = (known after apply)

}

**# aws\_s3\_bucket\_acl.my\_bucket** will be created

+ resource "aws\_s3\_bucket\_acl" "my\_bucket" {

+ acl = "private"

+ bucket = (known after apply)

+ id = (known after apply)

}

**# aws\_s3\_bucket\_ownership\_controls.my\_bucket** will be created

+ resource "aws\_s3\_bucket\_ownership\_controls" "my\_bucket" {

+ bucket = (known after apply)

+ id = (known after apply)

+ rule {

+ object\_ownership = "BucketOwnerPreferred"

}

}

**Plan:** 5 to add, 0 to change, 0 to destroy.

Changes to Outputs:

~ bucket\_name = "brian azubi lab" -> "brian-azubi-lab"

**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 10s [id=brian-azubi-lab]**

**aws\_s3\_bucket\_ownership\_controls.my\_bucket: Creating...**

**aws\_iam\_policy.my\_policy: Creating...**

**aws\_s3\_bucket\_ownership\_controls.my\_bucket: Creation complete after 1s [id=brian-azubi-lab]**

**aws\_s3\_bucket\_acl.my\_bucket: Creating...**

**aws\_iam\_policy.my\_policy: Creation complete after 3s [id=arn:aws:iam::760984403257:policy/MyS3BucketPolicy]**

**aws\_s3\_bucket\_acl.my\_bucket: Creation complete after 2s [id=brian-azubi-lab,private]**

**aws\_iam\_user\_policy\_attachment.my\_user\_attachment: Creating...**

**aws\_iam\_user\_policy\_attachment.my\_user\_attachment: Creation complete after 2s [id=Devops\_Brian-20230730160517994200000001]**

Apply complete! Resources: 5 added, 0 changed, 0 destroyed.

Outputs:

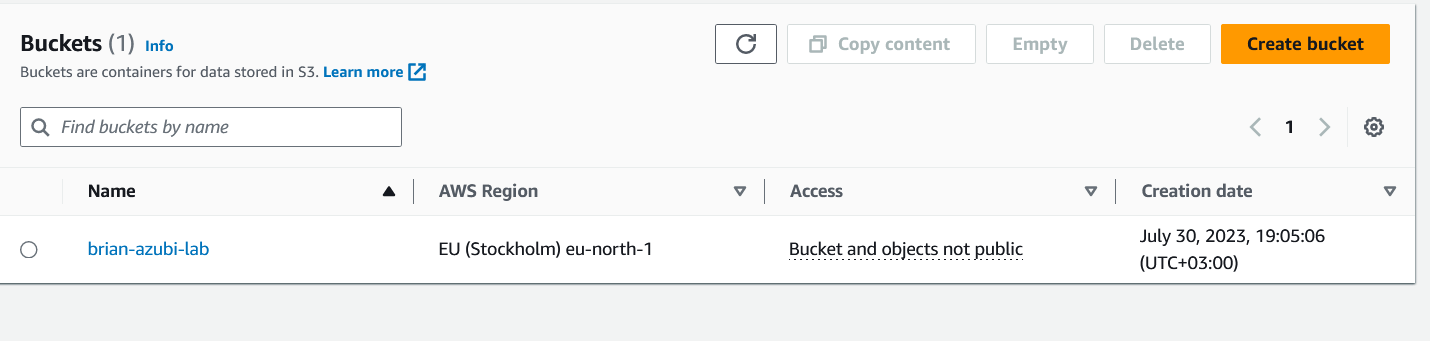
bucket\_name = "brian-azubi-lab"

iam\_user\_name = <sensitive>

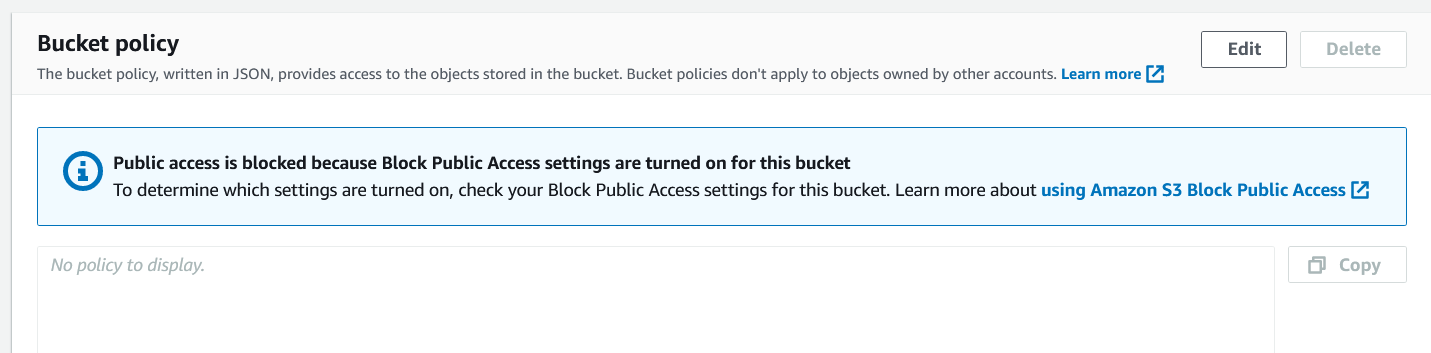
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**Provisioned Resources**

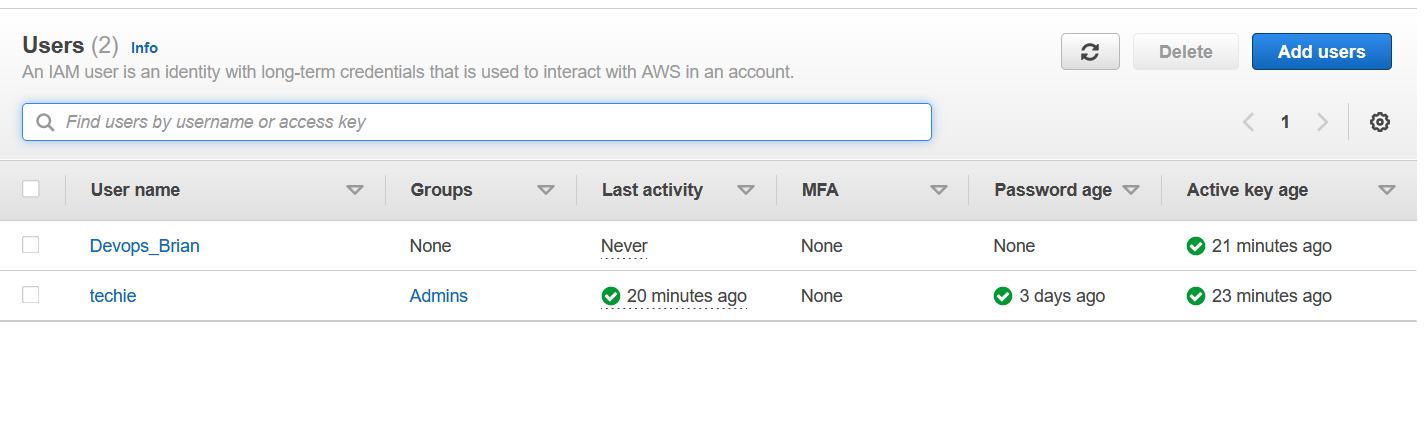
* **S3 bucket**

****

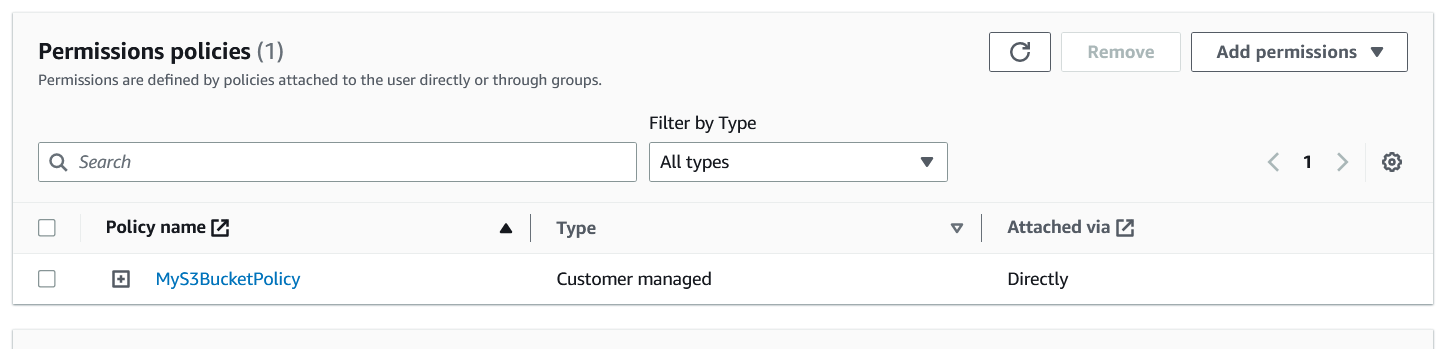
* **Bucket policy**

****

* **IAM User**



* **User Policy**

****