

Document Title: Creating S3 bucket using Terraform

Your Name: Akilandeshwari Srinivasan

Student ID: 451036

Course Code:CLCM3504

```
Administrator: Windows PowerShell
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\WINDOWS\system32> aws configure
AWS Access Key ID [*****]: ASIAGDUJMYZGUMT6TU0W
AWS Secret Access Key [*****]: q1JyUM2Mc0GqSNGPpBX6Kh8Dv3PKgIu/Chs8ev
Default region name [None]:
Default output format [None]:
PS C:\WINDOWS\system32> cd C:\Users\akila\Desktop\BVC\terraform\labS3
PS C:\Users\akila\Desktop\BVC\terraform\labS3> terraform init

Initializing the backend...

Initializing provider plugins...
- Finding latest version of hashicorp/aws...
- Installing hashicorp/aws v5.17.0...
- Installed hashicorp/aws v5.17.0 (signed by HashiCorp)

Terraform has created a lock file .terraform.lock.hcl to record the provider
selections it made above. Include this file in your version control repository
so that Terraform can guarantee to make the same selections by default when
you run "terraform init" in the future.

Terraform has been successfully initialized!

You may now begin working with Terraform. Try running "terraform plan" to see
any changes that are required for your infrastructure. All Terraform commands
should now work.

If you ever set or change modules or backend configuration for Terraform,
rerun this command to reinitialize your working directory. If you forget, other
commands will detect it and remind you to do so if necessary.
PS C:\Users\akila\Desktop\BVC\terraform\labS3> terraform plan

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.firsts3bck will be created
resource "aws_s3_bucket" "firsts3bck" {
  + acceleration_status = (known after apply)
  + acl                  = (known after apply)
  + arn                  = (known after apply)
  + bucket               = (known after apply)
  + bucket               = "akila-terraform-s3-bucket"
  + bucket_domain_name  = (known after apply)
  + bucket_prefix        = (known after apply)
}
```

```
Administrator: Windows PowerShell
PS C:\Users\akila\Desktop\BVC\terraform\labS3> terraform plan

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.firsts3bck will be created
resource "aws_s3_bucket" "firsts3bck" {
  + acceleration_status = (known after apply)
  + acl                  = (known after apply)
  + arn                  = (known after apply)
  + bucket               = (known after apply)
  + bucket               = "akila-terraform-s3-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.

Note: You didn't use the -out option to save this plan, so Terraform can't guarantee to take exactly these actions if
you run "terraform apply" now.
PS C:\Users\akila\Desktop\BVC\terraform\labS3> 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.firsts3bck will be created
resource "aws_s3_bucket" "firsts3bck" {
  + acceleration_status = (known after apply)
  + acl                  = (known after apply)
  + arn                  = (known after apply)
  + bucket               = (known after apply)
  + bucket               = "akila-terraform-s3-bucket"
}
```

```
Select Administrator: Windows PowerShell
PS C:\Users\akila\Desktop\BVC\terraform\lab53> you run "terraform apply" now.
PS C:\Users\akila\Desktop\BVC\terraform\lab53> 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.firsts3bck will be created
+ resource "aws_s3_bucket" "firsts3bck" {
  + acceleration_status      = (known after apply)
  + acl                      = (known after apply)
  + arn                     = (known after apply)
  + bucket                  = "akila-terraform-s3-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.

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.firsts3bck: Creating...
aws_s3_bucket.firsts3bck: Still creating... [10s elapsed]
aws_s3_bucket.firsts3bck: Creation complete after 20s [id=akila-terraform-s3-bucket]

Apply complete! Resources: 1 added, 0 changed, 0 destroyed.
PS C:\Users\akila\Desktop\BVC\terraform\lab53>
```

The screenshot displays the AWS S3 console interface. The top navigation bar shows the AWS logo, 'Services' menu, a search bar, and the user's profile. The left sidebar contains a navigation menu with options like Buckets, Access Points, Object Lambda Access Points, Multi-Region Access Points, Batch Operations, IAM Access Analyzer for S3, Block Public Access settings, Storage Lens, Dashboards, AWS Organizations settings, Feature spotlight, and AWS Marketplace for S3.

The main content area is titled 'Amazon S3' and is divided into two sections:

- Account snapshot:** This section shows the last update date (Sep 19, 2023) and provides a link to the Storage Lens dashboard. It displays four metrics: Total storage (106.4 MB), Object count (29), Average object size (3.7 MB), and a note about enabling advanced metrics in the 'default-account-dashboard' configuration.
- Buckets (1) Info:** This section shows a list of buckets. The first bucket is 'akila-terraform-s3-bucket' in the 'US East (N. Virginia) us-east-1' region. The access level is 'Bucket and objects not public', and the creation date is 'September 20, 2023, 19:55:09 (UTC-06:00)'. There are buttons for 'Copy ARN', 'Empty', 'Delete', and 'Create bucket'.

The bottom of the screen shows the Windows taskbar with various application icons and the system clock indicating the time is 07:58 PM on 20-09-2023.

```
Administrator: Windows PowerShell
PS C:\Users\akila\Desktop\BVC\terraform\lab53> terraform destroy
aws_s3_bucket.first3bck: Refreshing state... [id=akila-terraform-s3-bucket]

Terraform used the selected providers to generate the following execution plan. Resource actions are indicated with the following symbols:
destroy

Terraform will perform the following actions:

# aws_s3_bucket.first3bck will be destroyed
resource "aws_s3_bucket" "first3bck" {
  arn                = "arn:aws:s3:::akila-terraform-s3-bucket" -> null
  bucket             = "akila-terraform-s3-bucket" -> null
  bucket_domain_name = "akila-terraform-s3-bucket.s3.amazonaws.com" -> null
  bucket_regional_domain_name = "akila-terraform-s3-bucket.s3.us-east-1.amazonaws.com" -> null
  force_destroy      = false -> null
  hosted_zone_id     = "Z3AQBSTGFVJ3TF" -> null
  id                = "akila-terraform-s3-bucket" -> null
  object_lock_enabled = false -> null
  region            = "us-east-1" -> null
  request_payer      = "BucketOwner" -> null
  tags              = {} -> null
  tags_all          = {} -> null

  grant {
    id      = "10c4c172f125edbe8f991e524109bb84182f0810672717a70cb17bf16c67121a" -> null
    permissions = [
      "FULL_CONTROL",
    ] -> null
    type        = "CanonicalUser" -> null
  }

  server_side_encryption_configuration {
    rule {
      bucket_key_enabled = false -> null

      apply_server_side_encryption_by_default {
        sse_algorithm = "AES256" -> null
      }
    }
  }

  versioning {
    enabled     = false -> null
    mfa_delete = false -> null
  }
}

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

```
Administrator: Windows PowerShell
- tags              = {} -> null
- tags_all          = {} -> null

- grant {
  - id      = "10c4c172f125edbe8f991e524109bb84182f0810672717a70cb17bf16c67121a" -> null
  - permissions = [
    - "FULL_CONTROL",
  ] -> null
  - type        = "CanonicalUser" -> null
}

- server_side_encryption_configuration {
  - rule {
    - bucket_key_enabled = false -> null

    - apply_server_side_encryption_by_default {
      - sse_algorithm = "AES256" -> null
    }
  }
}

- versioning {
  - enabled     = false -> null
  - mfa_delete = false -> null
}
}

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

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.first3bck: Destroying... [id=akila-terraform-s3-bucket]
aws_s3_bucket.first3bck: Destruction complete after 1s

Destroy complete! Resources: 1 destroyed.
PS C:\Users\akila\Desktop\BVC\terraform\lab53>
```

