

## S3 using Terraform

Step 1: Install terraform and open directory

Step2: create two files main.tf and variable.tf with below scripts.

```
resource "aws_s3_bucket" "my_bucket" {  
    bucket = "terrafor-s3-bucket"  
    acl = "private"  
    versioning {  
        enabled = "false"  
    }  
    force_destroy = "false"  
}
```

```
variable "aws_access_key" {}
```

```
variable "aws_secret_key" {}
```

Provider.tf

```
provider "aws" {  
    access_key = "${var.aws_access_key}"  
    secret_key = "${var.aws_secret_key}"  
    region    = "us-west-1"  
}
```

Instances | EC2 Management Console | EC2 Instance Connect

us-west-1.console.aws.amazon.com/ec2-instance-connect/ssh?connType=standard&instanceId=i-066a96d4b49f...

aws Services Search [Alt+S] N. California Bhargav L N S N

```
[root@ip-172-31-22-178 ec2-user]# mkdir s3project
[root@ip-172-31-22-178 ec2-user]# cd s3project/
[root@ip-172-31-22-178 s3project]#
```

i-066a96d4b49f4915f (practice)

PublicIPs: 54.215.215.65 PrivateIPs: 172.31.22.178

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us-west-1.console.aws.amazon.com/ec2-instance-connect/ssh?connType=standard&instanceId=i-066a96d4b49f...

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```
resource "aws_s3_bucket" "my_bucket" {
  bucket = "terrafor-s3-bucket"
  acl = "public-read-write"
  versioning {
    enabled = "false"
  }
  force_destroy = "false"
}
variable "aws_access_key" {}
variable "aws_secret_key" {}
~
~
~
~
~
~
~
~
~
~
-- INSERT --
```

i-066a96d4b49f4915f (practice)

PublicIPs: 54.215.215.65 PrivateIPs: 172.31.22.178

```
provider "aws" {
  access_key = "${var.aws_access_key}"
  secret_key = "${var.aws_secret_key}"
  region     = "us-west-1"
}
```

i-066a96d4b49f4915f (practice)

PublicIPs: 54.215.215.65 PrivateIPs: 172.31.22.178

```
[root@ip-172-31-22-178 ec2-user]# mkdir s3project
[root@ip-172-31-22-178 ec2-user]# cd s3project/
[root@ip-172-31-22-178 s3project]# vim main.tf
[root@ip-172-31-22-178 s3project]# vim provider.tf
[root@ip-172-31-22-178 s3project]#
```

i-066a96d4b49f4915f (practice)

PublicIPs: 54.215.215.65 PrivateIPs: 172.31.22.178

Instances | EC2 Management Console | EC2 Instance Connect

us-west-1.console.aws.amazon.com/ec2-instance-connect/ssh?connType=standard&instanceId=i-066a96d4b49f...

aws Services Search [Alt+S] N. California Bhargav L N S N

```
[root@ip-172-31-22-178 s3project]# vim provider.tf
[root@ip-172-31-22-178 s3project]# terraform init

Initializing the backend...

Initializing provider plugins...
- Finding latest version of hashicorp/aws...
- Installing hashicorp/aws v4.65.0...
- Installed hashicorp/aws v4.65.0 (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.
[root@ip-172-31-22-178 s3project]#
```

i-066a96d4b49f4915f (practice)

PublicIPs: 54.215.215.65 PrivateIPs: 172.31.22.178

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Instances | EC2 Management Console | EC2 Instance Connect

us-west-1.console.aws.amazon.com/ec2-instance-connect/ssh?connType=standard&instanceId=i-066a96d4b49f...

aws Services Search [Alt+S] N. California Bhargav L N S N

```
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.
[root@ip-172-31-22-178 s3project]# terraform validate

Warning: Argument is deprecated
  with aws_s3_bucket.my_bucket,
  on main.tf line 1, in resource "aws_s3_bucket" "my_bucket":
    1: resource "aws_s3_bucket" "my_bucket" {

Use the aws_s3_bucket_versioning resource instead

(and one more similar warning elsewhere)

Success! The configuration is valid, but there were some validation warnings as shown above.
[root@ip-172-31-22-178 s3project]#
```

i-066a96d4b49f4915f (practice)

PublicIPs: 54.215.215.65 PrivateIPs: 172.31.22.178

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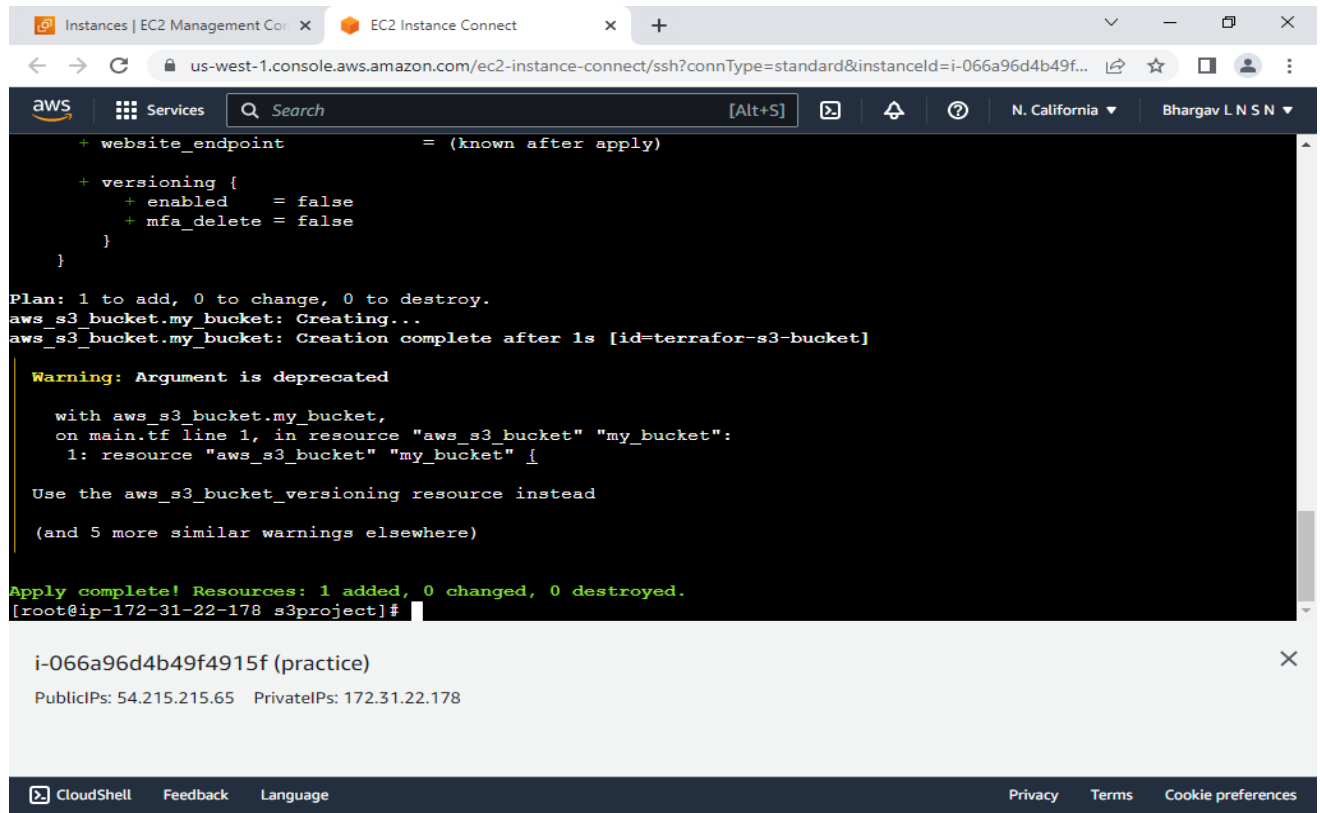
Step4: Now apply below commands to initialize terraform

i. Terraform init

ii. Terraform validate

iii. Terraform plan

iv. Terraform apply –auto-approve



The screenshot shows the AWS CloudShell interface with a terminal window. The terminal displays the output of a Terraform apply command. It shows the creation of an S3 bucket named 'my\_bucket' with versioning enabled. The output includes a warning about a deprecated argument and a confirmation that the apply was successful.

```
aws_s3_bucket.my_bucket: Creating...
aws_s3_bucket.my_bucket: Creation complete after 1s [id=terrafor-s3-bucket]

Warning: Argument is deprecated

  with aws_s3_bucket.my_bucket,
  on main.tf line 1, in resource "aws_s3_bucket" "my_bucket":
   1: resource "aws_s3_bucket" "my_bucket" {

Use the aws_s3_bucket_versioning resource instead
(and 5 more similar warnings elsewhere)

Apply complete! Resources: 1 added, 0 changed, 0 destroyed.
[root@ip-172-31-22-178 s3project]#
```

Below the terminal window, the instance ID 'i-066a96d4b49f4915f (practice)' is displayed, along with its PublicIPs (54.215.215.65) and PrivateIPs (172.31.22.178).

S3 bucket has been created.

The screenshot displays the AWS S3 Management Console interface. The left-hand navigation pane is open, showing the 'Buckets' section under 'Amazon S3'. The main content area shows the 'Buckets (1)' page, which includes an 'Account snapshot' section and a list of buckets. A single bucket, 'terrafor-s3-bucket', is listed with the following details:

Name	AWS Region	Access	Creation date
terrafor-s3-bucket	US West (N. California) us-west-1	Bucket and objects not public	April 28, 2023, 10:23:50

The console also features a 'Create bucket' button and a search bar for finding buckets by name. The top navigation bar includes the AWS logo, a search bar, and the user's name 'Bhargav L N S N'.