

Terraform Error Fix Log

Problem:

Error: Reference to undeclared input variable
on main.tf line 31, in resource "aws_iam_access_key" "test_user_key":
31: count = var.create_access_key ? 1 : 0
An input variable with the name "create_access_key" has not been declared.

Fix:

1. Added a provider block in *provider.tf*:

```
provider "aws" {  
    region = "us-east-1"  
    profile = "admin"  
}
```

This selects the AWS provider, sets the default region, and chooses the AWS profile.

2. Declared variables in *variables.tf*:

- **test_user_name**: Default = "TestUser"
- **aws_region**: Default = "us-east-1"
- **aws_profile**: Default = "admin"
- **create_access_key**: Default = false

These variables let Terraform substitute values safely instead of throwing errors.

Why the fixes worked:

1. Provider block (provider.tf):

- Problem: Terraform didn't know which cloud, region, or credentials to use.
- Fix: Specifying provider, region, and profile gave Terraform clear instructions.
- Result: Terraform could initialize and talk to AWS with a valid identity.

2. Variables (variables.tf):

- Problem: Variables like `var.create_access_key` were referenced but not declared.
- Fix: Declaring them with type and default gave Terraform valid definitions.
- Result: Terraform can now safely substitute defaults (TestUser, us-east-1, admin, false) instead of failing.

Summary:

- Provider fix = taught Terraform how to connect to AWS.
- Variable fix = told Terraform what each placeholder meant.