

# How to Import EC2 Infrastructure from AWS into Terraform

## Step 1: Create a main.tf File

Start by creating a `main.tf` file and configure it with the necessary provider and resource blocks. For example:

```
provider "aws" {  
    region = "us-east-1" # Specify your AWS region  
}  
  
resource "aws_instance" "example" {  
    id = "i-0168ce667ee985293"  
    to = aws_instance.example  
}
```

## Step 2: Initialize Terraform

Run the following command to initialize Terraform and download the required provider plugins:

**terraform init**

## Step 3: Generate Resource Configuration

Use the `terraform import` command with the `-generate-config-out` flag to generate configuration for existing resources. For example:

**terraform plan -generate-config-out=generated\_resources.tf**

This will create a `generated_resources.tf` file containing the configuration for your existing AWS resources.

## Step 4: Import Resources

Import each resource into Terraform's state file using the `terraform import` command. For example, to import an EC2 instance:

**terraform import aws\_instance.example i-0168ce667ee985293**

Replace `aws_instance.example` with the resource name and `i-0168ce667ee985293` with the actual instance ID.

## Step 5: Copy Configuration to main.tf

After importing, copy the relevant resource configurations from `generated_resources.tf` into your `main.tf` file. This ensures Terraform has the correct configuration for managing the resources.

## Step 6: Verify with terraform plan

Run the following command to verify that Terraform recognizes the imported resources and that there are no changes to be made:

**terraform plan**

If the import was successful, Terraform will show no changes, as the state file now matches the actual infrastructure.

## Step 7: Successfully Imported Infrastructure

At this point, your AWS infrastructure has been successfully imported into Terraform, and you can manage it using Terraform's workflow