provider "aws" {

region = "us-east-1" # Modify according to your region

}

resource "aws\_iam\_policy" "example\_policy" {

name = "example-policy"

description = "Example policy for Terraform"

policy = jsonencode({

Version = "2012-10-17",

Statement = [

{

Effect = "Allow",

Action = "ec2:\*",

Resource = "\*",

},

],

})

}

resource "aws\_iam\_role" "example\_role" {

name = "example-role"

assume\_role\_policy = jsonencode({

Version = "2012-10-17",

Statement = [

{

Effect = "Allow",

Principal = { Service = "ec2.amazonaws.com" },

Action = "sts:AssumeRole",

},

],

})

}

resource "aws\_iam\_role\_policy\_attachment" "example\_attachment" {

role = aws\_iam\_role.example\_role.name

policy\_arn = aws\_iam\_policy.example\_policy.arn

}

resource "aws\_instance" "example\_instance" {

count = 2

ami = "ami-0c55b159cbfafe1f0"

instance\_type = "t2.micro"

tags = {

Name = "example-instance-${count.index}"

}

# Associate the IAM instance profile with the role

iam\_instance\_profile = aws\_iam\_instance\_profile.example\_instance\_profile.name

}

resource "aws\_iam\_instance\_profile" "example\_instance\_profile" {

name = "example-instance-profile"

role = aws\_iam\_role.example\_role.name

}