

Detailed Terraform Examples

1. Backend configuration

Each Terraform configuration can specify a backend, which defines where state snapshots are stored.

```
terraform {  
  backend "s3" {  
    bucket = "aws-infrastructure-tfstate"  
    key    = "devops/terraform.tfstate"  
    region = "ap-south-1"  
  }  
}
```

2. Example - SSH to server through security group

// generate ssh-key pair from AWS console

```
provider "aws" {  
  region = "ap-south-1"  
}  
  
resource "aws_instance" "instance01" {  
  ami = "ami-09ba48996007c8b50"  
  instance_type = "t2.micro"  
  key_name = "ritesh-devops-demo"  
  tags = {  
    Name = "terraform-devops"  
  }  
  security_groups = ["${aws_security_group.AWSaccess.name}"]  
}  
  
resource "aws_security_group" "AWSaccess" {  
  name = "AWSaccess"  
  description = "SSH access"  
  
  ingress {  
    protocol = "tcp"  
    from_port = 22  
    to_port = 22  
    cidr_blocks = ["0.0.0.0/0"]  
  }  
}
```

3. Example - Custom key-pair value

```
provider "aws" {  
  region = "ap-south-1"
```

```

}

resource "aws_key_pair" "awsKey" {
  key_name = "devops-serverKey"
  public_key = "${file("devops-serverKey.pub")}"
}

resource "aws_instance" "instance01" {
  ami = "ami-09ba48996007c8b50"
  instance_type = "t2.micro"
  key_name = aws_key_pair.awsKey.key_name
  tags = {
    Name = "terraform-example"
  }
  security_groups = ["${aws_security_group.AWSaccess.name}"]
}

resource "aws_security_group" "AWSaccess" {
  name = "AWSaccess"
  description = "SSH access"

  ingress {
    protocol = "tcp"
    from_port = 22
    to_port = 22
    cidr_blocks = ["0.0.0.0/0"]
  }
}

```

4. Example - Search ami and use it in resource

```

provider "aws" {
  region = "ap-south-1"
}

data "aws_ami" "amazon_linux_2" {
  most_recent = true
  owners      = ["amazon"]

  filter {
    name   = "name"
    values = ["amzn2-ami-hvm*"]
  }
}

output "amazon-ami" {
  value = "${data.aws_ami.amazon_linux_2.id}"
}

```

```
resource "aws_key_pair" "awsKey" {
  key_name = "appserverKey"
  public_key = "${file("${HOME}/.ssh/id_rsa.pub")}"
}

resource "aws_instance" "instance01" {
  ami = data.aws_ami.amazon_linux_2.id
  instance_type = "t2.micro"
  key_name = aws_key_pair.awsKey.key_name
  tags = {
    Name = "terraform-example"
  }
  security_groups = ["${aws_security_group.AWSaccess.name}"]
}

resource "aws_security_group" "AWSaccess" {
  name = "AWSaccess"
  description = "SSH access"

  ingress {
    protocol = "tcp"
    from_port = 22
    to_port = 22
    cidr_blocks = ["0.0.0.0/0"]
  }
}
```

Name: Ritesh Goyal
Contact: 9960930111
Email-id: ritesh.devopstrainer@gmail.com