

Launch Linux EC2 instances in two regions using a single Terraform file.

```
yugan@Yugan:~/Tform1$ sudo ssh-keygen -t rsa -b 4096 -f terraform-key
Generating public/private rsa key pair.
Enter passphrase (empty for no passphrase):
Enter same passphrase again:
Your identification has been saved in terraform-key
Your public key has been saved in terraform-key.pub
The key fingerprint is:
SHA256:bOMTbQXEfKHd0V3H3Xjyr6WWUx5lz1B1LJhHvg1tu2s root@Yugan
The key's randomart image is:
+---[RSA 4096]---+
| +o .=o=@|
| o++o=o%|
| ..o.+*o|
| . . . .==|
| S o .==|
| o + .B|
| o 0.|
| . *Eo|
| ..o |
+---[SHA256]---+
yugan@Yugan:~/Tform1$ ls
main.tf  terraform-key  terraform-key.pub
```

```
yugan@Yugan:~/Tform1$ ls
main.tf  terraform-key  terraform-key.pub
yugan@Yugan:~/Tform1$
```

```
awskey completed: resources: 1 destroyed: 0
yugan@Yugan:~/Tform1$ aws ec2 import-key-pair \
>   --key-name terraform-key \
>   --public-key-material fileb://terraform-key.pub \
region us-east-2
{
    "KeyFingerprint": "d7:f2:6e:08:b1:52:63:e5:ef:57:06:19:40:52:8c:52",
    "KeyName": "terraform-key",
    "KeyPairId": "key-066f257b528ba62cf"
}
yugan@Yugan:~/Tform1$
```

```
yugan@Yugan:~/Tform1$ aws ec2 import-key-pair \
>   --key-name terraform-key \
>   --public-key-material fileb://terraform-key.pub \
>   --region us-west-2
{
    "KeyFingerprint": "d7:f2:6e:08:b1:52:63:e5:ef:57:06:19:40:52:8c:52",
    "KeyName": "terraform-key",
    "KeyPairId": "key-0950f4c81686b97da"
}
yugan@Yugan:~/Tform1$
```

```
yugan@Yugan:~/Tform1$ cat main.tf
#####
# Providers
#####

provider "aws" {
  alias  = "east"
  region = "us-east-2"
}

provider "aws" {
  alias  = "west"
  region = "us-west-2"
}

#####
# EC2 in us-east-2
#####

resource "aws_instance" "East_instance" {
  ami          = "ami-06e3c045d79fd65d9" # Amazon Linux 2 (us-east-2)
  instance_type = "t3.micro"

  tags = {
    Name = "East-linux-ec2"
    Region = "us-east-2"
  }
}

#####
# EC2 in us-west-2
#####

resource "aws_instance" "west_instance" {
  provider      = aws.west
  ami          = "ami-00d8a0260a086a99e" # Amazon Linux 2 (us-west-2)
  instance_type = "t3.micro"

  tags = {
    Name = "west-linux-ec2"
    Region = "us-west-2"
  }
}
```

```
yugan@Yugan:~/Tform1$ terraform init
Initializing the backend...
Initializing provider plugins...
- Finding hashicorp/aws versions matching "~> 5.0"...
- Installing hashicorp/aws v5.100.0...
- Installed hashicorp/aws v5.100.0 (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.
yugan@Yugan:~/Tform1$
```

```

yugan@Yugan:~/Tform1$ terraform apply

Terraform used the selected providers to generate the following execution plan. R
+ create

Terraform will perform the following actions:

  # aws_instance.East_instance will be created
+ resource "aws_instance" "East_instance" {
    .
    .

Plan: 2 to add, 0 to change, 0 to destroy.

Do you want to perform these actions?
  Terraform will perform the actions described above.
  Only 'yes' will be accepted to approve.

Enter a value: yes

aws_instance.East_instance: Creating...
aws_instance.west_instance: Creating...
aws_instance.East_instance: Still creating... [10s elapsed]
aws_instance.west_instance: Still creating... [10s elapsed]
aws_instance.west_instance: Creation complete after 16s [id=i-0390681363f2ad600]
aws_instance.East_instance: Creation complete after 16s [id=i-0bad6b78056607579]

Apply complete! Resources: 2 added, 0 changed, 0 destroyed.
yugan@Yugan:~/Tform1$
```

Ec2 created | East Region

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public
west-linux-ec2	i-0390681363f2ad600	Running	t3.micro	3/3 checks passed	View alarms +	us-west-2b	ec2-44-255-27-112.us...	44.255

Ec2 created in West Region

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability
East-linux-ec2	i-0bad6b78056607579	Running	t3.micro	3/3 checks passed	View alarms +	us-east-2b

