

## Terraform Assignment – 2

```
user@user: ~/terra
GNU nano 6.2
provider "aws" {
    region = "us-east-2"
    access_key = "AKIA4MTWGW7C33ESVYP3"
    secret_key = "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"
}

data "aws_vpc" "default" {
    default = true
}

resource "aws_instance" "ubuntu" {
    ami = "ami-0884d2865dbe9de4b"
    instance_type = "t2.micro"
}

resource "aws_eip" "eip" {
    domain = "vpc"
}

resource "aws_eip_association" "eip_assoc" {
    instance_id = aws_instance.ubuntu.id
    allocation_id = aws_eip.eip.id
}
```

```
user@user:~/terra$ terraform apply
data.aws_vpc.default: Reading...
data.aws_vpc.default: Read complete after 4s [id=vpc-0cc3949c9cf957a84]

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

Terraform will perform the following actions:

# aws_eip.eip will be created
+ resource "aws_eip" "eip" {
  + allocation_id      = (known after apply)
  + arn                = (known after apply)
  + association_id     = (known after apply)
  + carrier_ip         = (known after apply)
  + customer_owned_ip  = (known after apply)
  + domain             = "vpc"
  + id                = (known after apply)
  + instance           = (known after apply)
  + ipam_pool_id       = (known after apply)
  + network_border_group = (known after apply)
  + network_interface  = (known after apply)
  + private_dns        = (known after apply)
  + private_ip         = (known after apply)
  + ptr_record         = (known after apply)
  + public_dns         = (known after apply)
  + public_ip          = (known after apply)
  + public_ipv4_pool    = (known after apply)
  + tags_all           = (known after apply)
  + vpc                = (known after apply)
}

# aws_eip_association.eip_assoc will be created
+ resource "aws_eip_association" "eip_assoc" {
  + allocation_id      = (known after apply)
  + id                = (known after apply)
  + instance_id        = (known after apply)
  + network_interface_id = (known after apply)
  + private_ip_address  = (known after apply)
}
```

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```

+ vpc_security_group_ids           = (known after apply)
+ capacity_reservation_specification (known after apply)
+ cpu_options (known after apply)
+ ebs_block_device (known after apply)
+ enclave_options (known after apply)
+ ephemeral_block_device (known after apply)
+ instance_market_options (known after apply)
+ maintenance_options (known after apply)
+ metadata_options (known after apply)
+ network_interface (known after apply)
+ private_dns_name_options (known after apply)
+ root_block_device (known after apply)
}

```

Plan: 3 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\_eip.eip: Creating...

aws\_instance.ubuntu: Creating...

aws\_eip.eip: Creation complete after 3s [id=eipalloc-02d5d71960763938d]

aws\_instance.ubuntu: Still creating... [10s elapsed]

aws\_instance.ubuntu: Creation complete after 17s [id=i-0c4433b73d51a69ad]

aws\_eip\_association.eip\_assoc: Creating...

aws\_eip\_association.eip\_assoc: Creation complete after 2s [id=eipassoc-090efce2]

Apply complete! Resources: 3 added, 0 changed, 0 destroyed.

user@user:~/terra\$

Instances (2) Info

Find Instance by attribute or tag (case-sensitive)

All states

Last updated less than a minute ago

Connect

Instance state

Actions

Launch instances

<input type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public IPv4 ...	Elastic IP
<input type="checkbox"/>		i-0409f7314e2b26a76	<div>Terminated</div>	t2.micro	-	<div>View alarms +</div>	us-east-2a	-	-	-
<input type="checkbox"/>		i-0c4433b73d51a69ad	<div>Running</div>	t2.micro	<div>Initializing</div>	<div>View alarms +</div>	us-east-2a	ec2-3-147-162-27.us-e...	3.147.162.27	3.147.162.27

## Elastic IP addresses (1)



Actions

Allocate Elastic IP address

Find resources by attribute or tag

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<input type="checkbox"/>	Name	Allocated IPv4 address	Type	Allocation ID	Reverse DNS record	Associated instance ID	Private IP address
<input type="checkbox"/>	-	<a href="#">3.147.162.27</a>	Public IP	eipalloc-02d5d71960763938d	-	<a href="#">i-0c4433b73d51a69ad</a>	172.31.1.165

```

user@user:~/terra$ terraform destroy
data.aws_vpc.default: Reading...
aws_eip.eip: Refreshing state... [id=eipalloc-02d5d71960763938d]
aws_instance.ubuntu: Refreshing state... [id=i-0c4433b73d51a69ad]
data.aws_vpc.default: Read complete after 3s [id=vpc-0cc3949c9cf957a84]
aws_eip_association.eip_assoc: Refreshing state... [id=eipassoc-090efce28e70e09a2]

Terraform used the selected providers to generate the following execution plan. Resource actions are indicated with the following symbols:
- destroy

Terraform will perform the following actions:

# aws_eip.eip will be destroyed
- resource "aws_eip" "eip" {
  - allocation_id      = "eipalloc-02d5d71960763938d" -> null
  - arn                = "arn:aws:ec2:us-east-2:851725170629:elastic-ip/eipalloc-02d5d71960763938d" -> null
  - association_id     = "eipassoc-090efce28e70e09a2" -> null
  - domain            = "vpc" -> null
  - id                = "eipalloc-02d5d71960763938d" -> null
  - instance          = "i-0c4433b73d51a69ad" -> null
  - network_border_group = "us-east-2" -> null
  - network_interface  = "eni-040335f04b8456043" -> null
  - private_dns        = "ip-172-31-1-165.us-east-2.compute.internal" -> null
  - private_ip         = "172.31.1.165" -> null
  - public_dns         = "ec2-3-147-162-27.us-east-2.compute.amazonaws.com" -> null
  - public_ip          = "3.147.162.27" -> null
  - public_ipv4_pool    = "amazon" -> null
  - tags               = {} -> null
  - tags_all           = {} -> null
  - vpc                = true -> null
  # (4 unchanged attributes hidden)
}

# aws_eip_association.eip_assoc will be destroyed
- resource "aws_eip_association" "eip_assoc" {
  - allocation_id      = "eipalloc-02d5d71960763938d" -> null
  - id                = "eipassoc-090efce28e70e09a2" -> null
  - instance_id       = "i-0c4433b73d51a69ad" -> null
  - network_interface_id = "eni-040335f04b8456043" -> null
  - private_ip_address = "172.31.1.165" -> null
  - public_ip          = "3.147.162.27" -> null
}

# aws_instance.ubuntu will be destroyed
- resource "aws_instance" "ubuntu" {
  - ami = "ami-0884d2865dbe9de4b" -> null

```

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- http_tokens          = "optional" -> null
- instance_metadata_tags = "disabled" -> null
}

- private_dns_name_options {
- enable_resource_name_dns_a_record    = false -> null
- enable_resource_name_dns_aaaa_record = false -> null
- hostname_type                       = "ip-name" -> null
}

- root_block_device {
- delete_on_termination = true -> null
- device_name           = "/dev/sda1" -> null
- encrypted             = false -> null
- iops                  = 100 -> null
- tags                  = {} -> null
- tags_all              = {} -> null
- throughput            = 0 -> null
- volume_id             = "vol-037a2a86fe76bb4fe" -> null
- volume_size           = 8 -> null
- volume_type           = "gp2" -> null
  # (1 unchanged attribute hidden)
}
}

```

Plan: 0 to add, 0 to change, 3 to destroy.

Do you really want to destroy all resources?

Terraform will destroy all your managed infrastructure, as shown above.  
There is no undo. Only 'yes' will be accepted to confirm.

Enter a value: yes

```

aws_eip_association.eip_assoc: Destroying... [id=eipassoc-090efce28e70e09a2]
aws_eip_association.eip_assoc: Destruction complete after 4s
aws_eip.eip: Destroying... [id=eipalloc-02d5d71960763938d]
aws_instance.ubuntu: Destroying... [id=i-0c4433b73d51a69ad]
aws_eip.eip: Destruction complete after 2s
aws_instance.ubuntu: Still destroying... [id=i-0c4433b73d51a69ad, 10s elapsed]
aws_instance.ubuntu: Still destroying... [id=i-0c4433b73d51a69ad, 20s elapsed]
aws_instance.ubuntu: Still destroying... [id=i-0c4433b73d51a69ad, 30s elapsed]
aws_instance.ubuntu: Still destroying... [id=i-0c4433b73d51a69ad, 40s elapsed]
aws_instance.ubuntu: Destruction complete after 44s

```

Destroy complete! Resources: 3 destroyed.

user@user:~/terra\$

Instances (2) <small>Info</small>										
<input type="text" value="Find Instance by attribute or tag (case-sensitive)"/>				All states ▾		<div> <div>Last updated less than a minute ago</div> <div>Connect</div> <div>Instance state ▾</div> <div>Actions ▾</div> <div>Launch instances ▾</div> </div>				
<input type="checkbox"/>	Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS	Public IPv4 ...	Elastic IP
<input type="checkbox"/>		i-0409f7314e2b26a76	Terminated	t2.micro	-	<a href="#">View alarms +</a>	us-east-2a	-	-	-
<input type="checkbox"/>		i-0c4433b73d51a69ad	Terminated	t2.micro	-	<a href="#">View alarms +</a>	us-east-2a	-	-	-

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Elastic IP addresses

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Actions

Allocate Elastic IP address

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Find resources by attribute or tag

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Name

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Allocated IPv4 addr...

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Type

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Allocation ID

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Reverse DNS record

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Associated instance ID

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Private IP address

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No Elastic IP addresses found in this Region